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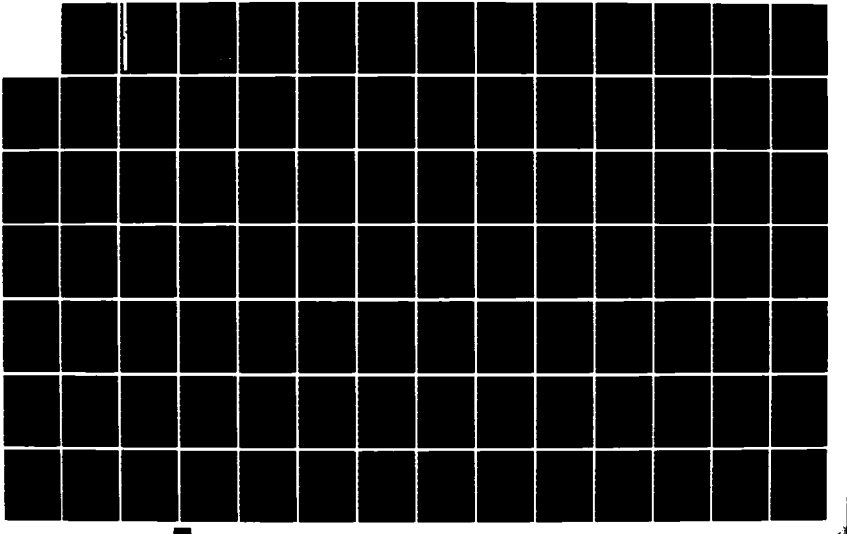

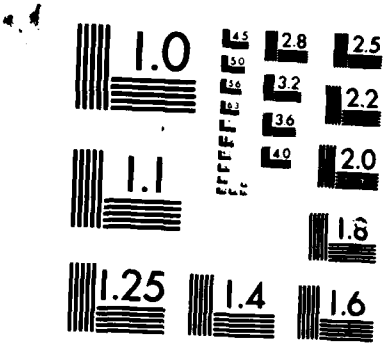

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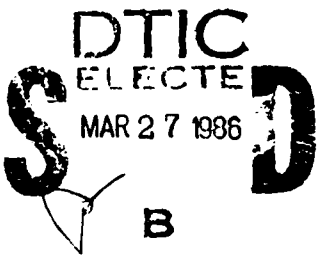
AD-A165 846

Structures Technical Memorandum 425

MIRAGE A3-002 STRAIN RESPONSES TO GROUND *CALIBRATION LOADINGS BETWEEN 1978 AND 1985*

by

M. G. J. HIGGS



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MIRAGE A3-002 STRAIN RESPONSES TO GROUND CALIBRATION LOADINGS BETWEEN 1978 AND 1985

by

M.G.J. HIGGS

SUMMARY

Between 1978 and 1985, ground calibration loads were applied at the main store and Sidewinder hard points on the wings of Mirage A3-002. Strain response measurements are tabulated for the wing and fuselage frame 26.

In general, consistent results were obtained over the measurement period.

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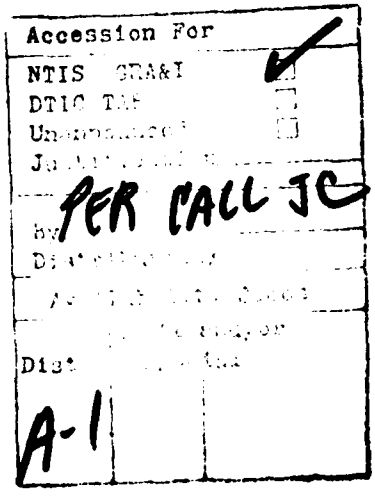
CONTENTS



1. INTRODUCTION

Prior to flight trials in 1978, (Ref. 1), a calibration of strain gauges fitted to Mirage A3-002 was carried out by measuring responses to ground loads applied at several locations on the Mirage wing. Since 1978, further ground calibrations have been made on the same aircraft. The loading procedure used was similar to that for earlier ground calibrations of other Mirage aircraft (Ref. 2). This Tech. Memo. provides a record of the output of strain gauges fitted to A3-002, and identifies some trends in these outputs. For some gauges, data is given for a seven-year period. Two loading cases are presented:

(a) loading at the main external store attachment point (denoted as hardpoint H05 on Fig.1);

(b) loading at the Sidewinder attachment point (H07).

The discussion is restricted to strain gauges fitted to wings and to fuselage frame 26.

2. RESULTS

Eleven ground calibrations, (see Table 1), were carried out in the period August 1978 to March 1985. The aircraft was supported on the three fuselage jacking stations. For all load calibrations, strain gauge readings were taken at initial zero load, then at 25, 50, 75 and 100% of the maximum calibrated load, and at 75, 25 and 0% as the load was reduced. The zero reading condition corresponded to the wing just clear of the loading jacks. Of the 24 gauges calibrated initially on 11 August 1978, 15 were recorded after 25 January 1979 and four, all on frame 26, after 8 July 1982. Other strain gauges were added during the seven-year period. Most of the gauges on the wings and frame 26 have been referred to and their locations defined in earlier ARL publications. New locations are defined in Figs 2 to 4. Table 2 provides a complete reference for locations of relevant gauges on the wings and frame 26. Some gauges referred to in the tables are located on other parts of the aircraft (Ref. 3) and are not discussed in this Memo.

It should be noted that:

(i) the maximum calibrated load (m.c.l.), for the main store loading case was approximately equivalent (in terms of applied bending moment) to a 1.0 g flight load increment;

(ii) for each strain gauge, the initial zero load strain reading was subtracted from all subsequent strain

responses so that hystersis effects and strain increments from zero load were clearly shown.

Strain responses against % m.c.l. are given in Tables 3 to 13 for the hardpoint H05 (or "03" series) load cases, and Tables 14 to 22 for the hardpoint H07 (or "06" series) load cases. Most calibrations involved two or three independent "runs" to provide a check on the repeatability of the responses on the day. Strain responses per 1000 kg against % m.c.l. are shown in Tables 23 to 33, for the H05 load cases, and in Tables 34 to 42 for the H07 load cases. These tables indicate linearity of the strain response/load relationship, and also the influence of hysteresis. The consistency of the strain responses for H05 loads (and separately H07 loads) over the full time period was investigated by computing the strain response for a standard mass of 2000 kg. Values for the 100% m.c.l. were averaged for the first two runs (when more than one calibration load run was carried out on a particular day) and the result factored by the ratio of the average load to the standard load. Summaries for the H05 and H07 load cases are shown in Tables 43 and 44 respectively.

3. DISCUSSION

Strain responses of many gauges during ground load calibrations carried out in 1978 on A3-002 were somewhat higher than expected considering earlier ground loadings of other strain-gauged Mirage wings. The 1978 responses were more typical of loadings of wings with wing-to-fuselage fairings removed. The results in Tables 43 and 44 show that these higher gauge responses were maintained (with two exceptions) throughout the seven-year period. Firstly, gauge 1.4T had a loss of response (about 15%) after 1978, possibly indicating some disbonding of this gauge from the spar. Secondly, for the load cases 2903 and 2906 carried out in January 1979, many gauges showed reduced response. For those calibrations, special care was taken to tighten the fairing fasteners before loads were applied. Strain responses for 2903 and 2906 are compared with 1978 calibrations in Table 45. Gauges are subdivided into four broad structural areas; namely, frame 26 upper and lower, wing main spar and wing lower panel. For many gauges the differences are statistically significant (at the 5% level), the tightening of the fairings being particularly effective in reducing stresses on the edge of the wing panel inboard of the fasteners. Hence, in considering the consistency of gauge response over the seven-year period, load cases 2903 and 2906 were excluded. The resulting statistics for strain gauge responses to main store and Sidewinder loads applied during the seven-year period are presented in Table 46. It is apparent that the outputs of gauges attached to the upper part of frame 26 are more consistent than those attached to the wing and the lower ("carry-through") part of frame 26. It is evident also that

the variability of strain response of the four gauges recorded over the full seven-year period (n=10 for H05) is not greater than the variability of gauges recorded over the four-year period from 1978 to 1982 (n=7 for H05). Gauge 323.3 on the centre-line of the wing spar shows more variability than other gauges to main store loading, a finding which was reported for this location on the F+W fatigue test wing (Ref. 5). Table 47 consolidates the results of Tables 45 and 46. It is evident that for gauges on frame 26 and the wing main spar, the average long term variability is about twice the short term (1978) variability. For gauges on the upper part of frame 26 (the most consistent group), variability is independent of load case; whereas, for other locations, variability for Sidewinder loading is about twice that for main store loading. This suggests that one source for the variability of strain gauge response is small changes of load transfer between the wing and fuselage.

4. CONCLUSIONS

a. Strain gauge outputs for the wing and frame 26 have been tabulated for main store and Sidewinder hardpoint loadings carried out between 1978 and 1985.

b. The response of many gauges was reduced when fairing fasteners were tightened in early 1979, but the original higher response was regained at later calibrations. This suggests that the fairing fasteners were, effectively, in the untightened condition.

c. Strain responses of gauges on the upper part of frame 26 were more consistent than those on the wing spar and the lower part of frame 26.

d For gauges on the upper part of frame 26, variability was independent of load case; whereas, for other locations, variability for Sidewinder loading was about twice that for main store loading.

e. For loadings at either hardpoint, the long term (4 to 7 years) variability was about twice the short term (4 months) variability.

ACKNOWLEDGEMENTS

The consistency of the strain responses reported here indicates the care with which the strain gauges were installed, the quality of the signal conditioning and the magnetic tape recording equipment, and the accuracy of the applied calibration loading. Many staff contributed, and, in particular, the efforts of G. Woodall, D. Smith, N. Watts and R. Bailey are gratefully acknowledged.

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TABLE 1

Load series summary

(H05) Load series no.	(H07) Load series no.	Date of calibration	Time elapsed since 11/8/78 (months)
2603.03	2606.12	11/ 8/78	-
2603.56	2606.45	14/ 5/78	-
2703	2706	18/12/78	4
2803	-	19/12/78	4
2903	2906	25/ 1/79	5
3403	-	10/11/81	39
3503	3506	2/12/81	40
3603	3606	8/ 7/82	47
4103	4106	12/12/84	76
4203	4206	13/ 2/85	78
4303	4306	27/ 3/85	80

TABLE 2

Definition of strain gauge locations

Strain gauge locations	Component	Reference to location
27.1, 27.2, 27.3, 27.4, 27.5	Sides of frame 26	ARL drawing 54719 (Ref. 1)
28.1, 28.2, 28.4, 28.5, 28.6, 28.7, 28.8, 28.9, 28.10	Lower frame 26	ARL drawing 54719 (Ref. 1)
35A, 35B, 35C, 36A, 36B	Sides of frame 26	Fig.2, this report
37, 38, 39, 40*	Lower strap, frame 26	Fig.3, this report
325.1, 324.1, 324.3, 323.1, 323.3, 323.5, 1.4, 1.6, 223, 328, 2	Wings	ARL drawing 56234 (Ref. 4)
16, 18, 320, 326	Wings	ARL drawing 55005 (Ref. 1)
324.4	Wings	Fig.4, this report

* Note that the locations of gauges 37 and 40 differ from the corresponding locations in the Swiss fatigue test aircraft (see Annexe A to Ref. 5).

TABLE 3

H05(main store): Load case 2603-3 on 11/8/78

Ch	Run	Gauge	Load (kg) 0	624	1254	1857	2488	1864	633	0
			Microstrain							
5	3	27.2	0	57	125	188	255	195	66	0
6	3	27.3	0	47	98	148	202	157	54	0
7	3	27.4	0	63	130	193	260	193	66	0
8	3	27.5	0	8	23	38	52	44	13	0
9	3	1.6SB	0	98	197	298	402	306	104	0
10	3	2SB	0	77	155	233	315	239	82	0
11	3	223SB	0	101	203	306	414	316	108	0
12	3	320SB	0	84	174	269	365	280	93	0
13	3	323.3SB	0	111	224	340	459	351	120	0
14	3	326SB	0	86	173	265	359	274	94	0
15	3	328SB	0	88	178	266	359	272	94	0
16	3	28.2	0	68	144	218	294	226	75	0
17	3	28.4	0	56	120	183	249	193	65	0
18	3	28.5	0	57	118	181	245	189	65	0
19	3	28.6	0	62	131	199	271	208	71	0
20	3	28.7	0	72	150	227	307	235	81	0
21	3	28.8	0	59	123	184	249	191	65	0
22	3	28.9	0	34	74	112	151	116	39	0
23	3	28.10	0	31	67	100	134	102	31	0
24	3	1.4SB	0	80	165	251	339	259	87	0
25	3	16SB	0	127	258	391	525	400	135	0
26	3	18PT	0	82	172	259	350	266	89	0
27	3	27.1	0	55	113	169	229	175	59	0
28	3	28.1	0	61	127	193	262	200	68	0

TABLE 4

H05(main store): Load case 2603-56 on 14/8/78

Ch	Run	Gauge	Load (kg) 0	630	1254	1878	2499	1871	628	0
			Microstrain							
5	5	27.2	0	58	123	189	255	195	65	0
	6		0	58	123	188	255	194	64	0
6	5	27.3	0	47	98	149	201	156	51	-3
	6		-3	42	93	144	196	150	49	-3
7	5	27.4	0	64	128	194	260	192	64	-2
	6		-2	62	127	192	258	191	62	-2
8	5	27.5	0	8	23	38	52	44	13	-2
	6		-2	5	20	35	50	42	11	-2
9	5	1.6SB	0	101	200	305	407	307	103	-2
	6		-2	95	197	300	403	304	102	-2
10	5	2SB	0	80	156	237	316	239	81	-2
	6		-2	74	154	233	313	236	80	-2
11	5	223SB	0	103	204	311	416	315	106	-2
	6		-2	99	203	307	414	313	106	-2
12	5	320SB	0	84	173	270	363	278	91	0
	6		0	80	173	268	363	276	92	0
13	5	323.3SB	0	114	226	344	462	350	118	0
	6		0	110	226	342	460	350	119	0
14	5	326SB	0	86	172	266	357	271	91	-3
	6		-3	82	171	262	355	269	91	-3
15	5	328SB	0	91	178	270	360	272	92	-1
	6		-1	86	176	266	357	269	91	-1
16	5	28.2	0	69	142	218	294	225	75	0
	6		0	69	144	219	295	227	76	0
17	5	28.4	0	54	114	177	240	185	61	-1
	6		-1	52	113	175	239	184	62	-1
18	5	28.5	0	60	119	185	247	190	64	0
	6		0	57	119	183	246	189	65	0
19	5	28.6	0	62	129	200	271	208	70	0
	6		0	62	130	199	271	208	70	0
20	5	28.7	0	74	152	231	310	238	81	-3
	6		-3	70	148	227	307	235	78	-3

TABLE 4 (Continued)

HO5(main store): Load case 2603-56 on 14 5 78

	Load (kg)		0	630	1254	1878	2499	1571	628	0
Ch	Run	Gauge	Microstrain							
21	5	25.8	0	60	121	185	251	191	65	-3
	6		-3	56	119	183	248	188	63	-3
22	5	28.9	0	37	75	116	156	120	41	3
	6		3	39	79	118	159	122	43	3
23	5	28.10	0	34	71	107	142	108	34	3
	6		3	37	73	108	145	110	37	3
24	5	1.4SB	0	84	167	256	342	259	87	1
	6		1	79	166	252	340	257	87	1
25	5	16SB	0	130	260	396	528	400	133	1
	6		1	126	260	393	527	399	135	1
26	5	18PT	0	84	171	260	351	266	89	-1
	6		-1	83	171	260	349	266	88	-1
27	5	27.1	0	56	112	170	228	173	57	1
	6		1	54	112	168	226	171	56	1
28	5	28.1	0	62	126	195	263	199	67	1
	6		1	63	129	196	264	201	70	1

TABLE 5

H05(main store): Load case 2703 on 18/12/78

Ch	Run	Gauge	Load (kg) 0	624	1245	1869	2490	1862	628	0
			Microstrain							
5	1	27.2	0	56	119	185	251	188	65	0
	2		0	58	118	184	249	188	63	0
6	1	27.3	0	46	96	149	202	154	53	0
	2		0	46	96	148	199	153	51	0
7	1	27.4	0	63	126	195	263	193	64	0
	2		0	62	126	193	260	191	63	0
8	1	27.5	0	8	22	34	50	41	12	-2
	2		-2	4	20	33	48	38	11	-2
9	1	1.6SB	0	102	201	303	407	309	106	0
	2		0	103	201	304	405	306	105	0
10	1	2SB	0	80	158	238	320	241	82	0
	2		0	81	159	238	318	240	81	0
11	1	223SB	0	105	207	313	422	318	109	0
	2		0	107	208	315	421	318	109	0
12	1	320SB	0	87	181	275	370	279	94	0
	2		0	93	181	276	370	279	95	0
13	1	323.3SB	0	125	243	365	485	374	135	15
	2		15	103	214	333	450	335	102	15
14	1	326SB	0	90	182	278	373	280	97	1
	2		1	94	183	278	372	282	98	1
15	1	328SB	0	92	180	271	365	275	94	-1
	2		-1	94	179	272	363	273	94	-1
16	1	28.2	0	69	142	217	294	224	78	0
	2		0	71	142	218	294	225	78	0
17	1	28.4	0	56	117	183	249	191	66	0
	2		0	59	118	184	249	191	67	0
18	1	28.5	0	62	123	191	258	196	68	1
	2		1	63	125	191	256	197	70	1
19	1	28.6	0	61	128	196	268	204	72	0
	2		0	62	127	196	267	205	72	0
20	1	28.7	0	71	149	230	313	239	82	0
	2		0	74	149	231	313	239	82	0

TABLE 5 (Continued)

H05(main store): Load case 2703 on 18/12/78

	Load (kg)		0	624	1245	1869	2490	1862	628	0
Ch	Run	Gauge				Microstrain				
21	1	28.8	0	62	126	192	260	199	70	3
	2		3	64	127	192	261	200	70	3
22	1	28.9	0	35	72	110	149	114	40	0
	2		0	39	73	112	150	116	40	0
23	1	28.10	0	33	71	107	143	107	35	0
	2		0	36	71	109	146	110	36	0
24	1	1.4SB	0	86	171	258	348	262	89	1
	2		1	87	170	259	347	262	89	1
25	1	16SB	0	135	267	402	539	406	136	0
	2		0	138	267	404	537	403	138	0
26	1	18PT	0	80	164	250	339	254	90	0
	2		0	82	164	250	338	255	88	0
27	1	27.1	0	55	112	171	232	175	59	0
	2		0	57	113	171	230	175	58	0
28	1	28.1	0	65	132	202	273	208	71	0
	2		0	67	133	204	273	208	73	0

TABLE 6

H05(main store): Load case 2803 on 19/12/78

Load (kg)			0	633	1245	1873	2499	1873	628	0
Ch	Run	Gauge	Microstrain							
5	1	27.2	0	53	114	180	246	187	60	-4
	2		-4	54	116	180	247	186	59	-4
6	1	27.3	0	45	95	148	199	154	51	-2
	2		-2	45	95	146	201	154	50	-2
7	1	27.4	0	65	127	195	262	195	66	1
	2		1	66	129	195	263	195	65	1
8	1	27.5	0	9	22	37	51	45	15	0
	2		0	8	22	36	51	44	13	0
9	1	1.6SB	0	101	200	305	405	308	105	0
	2		0	100	200	304	409	308	104	0
10	1	2SB	0	78	157	239	317	240	82	0
	2		0	78	157	237	320	240	81	0
11	1	223SB	0	103	205	314	418	316	109	0
	2		0	102	206	313	422	318	107	0
12	1	320SB	0	85	176	272	364	276	95	1
	2		1	86	178	271	368	276	91	1
13	1	323.3SB	0	113	228	349	465	353	121	0
	2		0	112	228	348	469	353	118	0
14	1	326SB	0	89	181	276	368	279	96	0
	2		0	89	181	274	372	280	94	0
15	1	328SB	0	90	179	273	363	274	95	0
	2		0	90	180	271	366	275	93	0
16	1	28.2	0	70	140	216	293	226	77	0
	2		0	70	142	216	294	226	76	0
17	1	28.4	0	58	117	183	248	192	66	0
	2		0	57	118	183	250	192	66	0
18	1	28.5	0	60	122	191	254	196	68	0
	2		0	60	122	189	257	196	67	0
19	1	28.6	0	63	127	196	267	207	72	0
	2		0	63	128	196	269	207	71	0
20	1	28.7	0	74	149	231	313	241	82	0
	2		0	73	151	231	315	241	82	0

TABLE 6 (Continued)

HO5(main store): Load case 2803 on 19/12/78

	Load (kg)		0	633	1245	1873	2499	1873	628	0
Ch	Run	Gauge	Microstrain							
21	1	28.8	0	61	123	191	258	199	69	0
	2		0	61	125	191	260	199	69	0
22	1	28.9	0	36	73	112	150	114	39	0
	2		0	35	73	112	151	116	39	0
23	1	28.10	0	36	72	108	146	111	36	0
	2		0	36	74	110	146	111	38	0
24	1	1.4SB	0	84	169	260	345	262	90	0
	2		0	84	169	258	349	262	88	0
25	1	16SB	0	133	266	404	535	404	138	0
	2		0	132	266	402	539	404	135	0
26	1	18PT	0	82	162	249	337	258	89	1
	2		1	84	165	249	339	258	89	1
27	1	27.1	0	57	114	173	233	178	61	0
	2		0	57	114	173	235	177	60	0
28	1	28.1	0	64	130	201	269	206	71	0
	2		0	64	131	200	272	207	70	0

TABLE 7

H05(main store): Load case 2903 on 25/1/79

		Load (kg)	0	630	1247	1867	2495	1869	628	0
Ch	Run	Gauge				Microstrain				
5	1	27.2	0	57	119	183	250	189	62	-1
	2		-1	57	119	184	252	191	65	-1
6	1	27.3	0	47	96	146	198	155	56	3
	2		3	49	98	151	199	156	56	3
7	1	27.4	0	64	128	191	259	191	65	0
	2		0	66	128	194	262	194	67	0
8	1	27.5	0	8	20	34	49	42	13	0
	2		0	7	20	33	47	38	12	0
9	1	1.6SB	0	98	195	293	392	300	106	2
	2		2	99	197	298	394	299	103	2
10	1	2SB	0	76	150	225	301	230	80	1
	2		1	77	151	229	303	229	78	1
11	1	223SB	0	100	199	298	400	305	108	3
	2		3	103	201	304	402	304	105	3
12	1	320SB	0	71	148	230	313	244	87	3
	2		3	71	148	231	312	240	82	3
13	1	323.3SB	0	107	217	340	436	340	132	16
	2		16	121	227	338	449	345	131	16
14	1	326SB	0	82	162	243	327	251	91	3
	2		3	84	164	247	328	251	88	3
15	1	328SB	0	87	172	259	347	264	92	2
	2		2	88	174	263	348	263	89	2
16	1	28.2	0	67	137	209	285	218	76	2
	2		2	70	140	212	287	217	75	2
17	1	28.4	0	57	118	179	245	190	68	2
	2		2	59	120	183	246	189	66	2
18	1	28.5	0	58	116	175	236	182	65	2
	2		2	59	117	178	237	181	62	2
19	1	28.6	0	61	125	191	261	200	70	2
	2		2	63	127	193	263	199	68	2
20	1	28.7	0	76	155	236	319	247	87	3
	2		3	79	156	239	320	246	85	3

TABLE 7 (Continued)

H05(main store): Load case 2903 on 25/1/79

Load (kg)			0	630	1247	1867	2495	1869	628	0
Ch	Run	Gauge	Microstrain							
21	1	28.8	0	61	125	189	257	197	69	1
	2		1	62	126	192	258	196	66	1
22	1	25.9	0	36	73	113	153	120	43	2
	2		2	37	75	114	153	118	41	2
23	1	25.10	0	31	65	99	134	103	35	0
	2		0	32	66	99	136	102	35	0
24	1	1.4SB	0	78	157	236	318	245	87	2
	2		2	81	159	241	320	244	84	2
25	1	16SB	0	120	238	360	482	371	131	3
	2		3	123	242	367	485	369	127	3
26	1	18PT	0	81	160	244	332	251	86	0
	2		0	82	161	245	335	251	88	0
27	1	27.1	0	57	112	168	226	173	61	0
	2		0	58	113	172	228	173	60	0
28	1	28.1	0	61	125	189	255	197	70	2
	2		2	65	127	192	256	195	68	2

TABLE 8

H05(main store): Load case 3403 on 10/11/81

		Load (kg)	0	474	903	1365	1835	1393	426	0
Ch	Run	Gauge				Microstrain				
4	1	323.5SB	0	66	135	205	293	218	62	-2
5	1	223SB	0	70	143	220	300	220	66	2
6	1	1.6SB	0	67	139	215	296	215	58	0
7	1	2SB	0	55	110	168	231	170	49	0
8	1	325.1SB	0	96	197	307	428	315	90	3
9	1	324.3SB	0	88	179	278	385	284	80	0
10	1	324.1SB	0	88	180	280	388	285	83	2
11	1	324.4SB	0	90	180	280	387	285	80	0
12	1	323.3SB	0	72	148	228	312	234	67	6
13	1	323.1SB	0	62	127	196	270	197	56	3
14	1	324.4PT	0	104	188	282	382	302	102	-2
15	1	323.5PT	0	85	153	234	316	251	85	-4
16	1	18PT	0	67	122	185	251	199	65	0
17	1	325.1PT	0	113	206	311	418	333	113	0
18	1	324.3PT	0	102	186	280	379	301	102	0
19	1	324.1PT	0	105	188	284	384	305	103	0
20	1	28.6	0	50	92	141	194	153	50	1
21	1	28.7	0	55	111	173	237	182	55	0
22	1	27.1	0	40	77	120	164	123	36	0
23	1	27.4	0	48	90	136	182	137	45	0
24	1	28.1	0	46	92	141	195	145	43	0
25	1	28.2	0	56	104	159	215	169	56	3
26	1	28.8	0	47	91	140	192	149	47	0
27	1	28.4	0	44	85	132	181	142	44	3

TABLE 8 (Continued)

H05(main store): Load case 3403 on 10/11/81

		Load (kg)	0	474	903	1365	1835	1393	426	0
Ch	Run	Gauge				Microstrain				
28	1	1.4SB	0	51	101	154	211	156	46	0
29	1	16TSB	0	87	176	272	373	277	80	0

TABLE 9

H05(main store): Load case 3503 on 2/12/81

Ch	Run	Gauge	Load (kg)	0	637	1254	1876	2495	1871	635	0
				Microstrain							
4	1	323.5SB		0	114	218	328	446	338	114	-4
	2			*0	108	220	330	448	340	112	-4
5	1	223SB		0	104	201	310	409	310	108	2
	2			2	100	204	310	411	314	106	2
6	1	1.6SB		0	104	201	307	407	308	108	2
	2			2	101	203	308	409	311	107	3
7	1	2SB		0	77	153	235	314	236	80	0
	2			0	75	153	236	314	239	80	0
8	1	325.1SB		0	147	289	443	590	448	156	0
	2			0	140	287	441	590	452	152	0
9	1	324.3SB		0	131	256	392	522	394	133	9
	2			9	112	244	380	515	389	116	19
10	1	324.1SB		0	135	261	399	531	403	144	0
	2			0	126	259	399	531	407	139	0
11	1	324.4SB		0	132	258	395	525	397	139	0
	2			0	124	256	395	525	401	137	2
12	1	323.3SB		0	105	207	319	429	324	110	0
	2			0	100	207	322	429	326	110	0
13	1	323.1SB		0	91	179	275	365	275	96	1
	2			1	88	180	277	366	278	95	3
14	1	324.4PT		0	138	265	396	534	402	136	4
	2			4	131	269	398	536	405	131	4
15	1	323.5PT		0	114	218	328	446	338	114	4
	2			0	108	220	330	448	340	112	4
16	1	18PT		0	89	176	262	356	266	89	0
	2			0	88	179	265	357	269	88	0
17	1	325.1PT		0	150	290	438	592	447	152	0
	2			0	145	295	440	595	452	150	2
18	1	324.3PT		0	137	262	396	538	406	139	0
	2			0	132	267	399	540	411	137	0
19	1	324.1PT		0	137	266	399	541	408	137	4
	2			0	133	271	401	543	412	135	4

TABLE 9 (Continued)

H05(main store): Load case 3503 on 2/12/81

Ch	Run	Gauge	Load (kg) 0	637	1254	1876	2495	1871	635	0
			Microstrain							
20	1	28.6	0	68	132	204	279	213	73	2
	2		2	65	135	205	280	216	72	2
21	1	28.7	0	79	156	241	326	248	85	0
	2		0	75	157	242	326	249	81	0
22	1	27.1	0	59	115	176	234	176	60	0
	2		0	57	116	176	234	178	60	0
23	1	27.4	0	64	125	189	254	189	65	0
	2		0	66	128	191	255	191	66	2
24	1	28.1	0	67	130	202	272	209	72	0
	2		0	64	131	204	274	211	71	0
25	1	28.2	0	73	144	219	299	227	78	0
	2		0	70	146	221	299	230	75	0
26	1	28.8	0	65	127	195	264	201	69	1
	2		1	60	127	195	263	202	65	2
27	1	28.4	0	63	122	190	258	198	67	0
	2		0	58	124	191	258	200	65	0
28	1	1.4SB	0	74	144	218	289	218	76	0
	2		0	70	142	218	289	219	74	3
29	1	16SB	0	134	260	395	520	395	139	0
	2		0	128	258	395	522	399	134	0

* Difference between final zero of one run and initial zero of next run may indicate substantial time delays between runs.

TABLE 10

H05(main store): Load case 3603 on 8/7/82

		Load (kg)	0	618	1249	1876	2484	1881	620	0
Ch	Run	Gauge	Microstrain							
5	1	223SB	0	102	208	314	418	320	108	0
	2		0	104	206	312	414	316	106	0
6	1	1.6SB	0	99	203	305	406	307	102	0
	2		0	101	200	304	401	304	101	0
7	1	2SB	0	77	160	242	320	246	83	0
	2		0	80	158	240	318	243	81	0
8	1	325.1SB	0	147	305	459	615	469	161	0
	2		2	152	301	457	608	466	156	2
9	1	324.3SB	0	131	273	411	555	422	145	0
	2		0	133	266	408	548	418	140	0
10	1	324.1SB	0	129	270	407	546	416	141	0
	2		2	133	266	405	542	414	139	0
11	1	324.4SB	0	126	260	392	527	399	134	0
	2		0	128	256	390	522	397	130	-2
12	1	323.3SB	0	105	222	334	446	341	114	0
	2		0	110	219	334	441	338	114	0
13	1	323.1SB	0	88	182	274	362	272	89	0
	2		0	91	179	271	359	271	89	0
14	1	324.4PT	0	127	267	396	529	402	136	0
	2		0	131	258	396	529	405	133	-2
15	1	323.5PT	0	104	224	336	452	346	116	0
	2		0	110	220	336	452	348	114	0
16	1	18PT	0	85	179	269	357	274	91	0
	2		0	89	176	269	357	276	91	0
17	1	325.1PT	0	138	297	444	598	456	152	0
	2		0	147	290	444	598	458	152	0
18	1	324.3PT	0	127	269	406	545	420	144	0
	2		2	135	267	406	548	420	142	2
19	1	324.1PT	0	129	273	408	546	419	142	0
	2		0	135	266	408	548	419	140	0
20	1	28.6	0	67	143	219	295	229	78	0
	2		1	71	141	219	295	229	78	1

TABLE 10 (Continued)

H05(main store): Load case 3603 on 8/7/82

Ch	Run	Gauge	Load (kg) 0	618	1249	1876	2484	1881	620	0
			Microstrain							
21	1	28.7	0	73	160	244	327	252	85	0
	2		-1	75	157	242	326	252	82	-3
22	1	27.1	0	58	117	177	239	180	62	0
	2		1	59	117	177	238	180	61	1
23	1	27.4	0	60	125	190	254	192	64	0
	2		1	66	126	193	257	196	65	3
24	1	28.1	0	66	139	211	283	219	74	0
	2		1	68	138	210	280	216	73	
25	1	28.2	0	71	153	231	311	239	80	0
	2		0	74	151	231	311	239	79	0
26	1	28.8	0	61	132	201	270	209	71	0
	2		-1	63	129	200	268	208	69	-1
27	1	28.4	0	56	122	187	255	197	66	0
	2		0	58	120	186	254	197	64	-1
28	1	1.4SB	0	71	145	219	290	222	74	0
	2		0	73	144	219	287	221	73	0
29	1	27.2	0	58	125	189	260	200	69	0
	2		2	62	123	191	262	204	71	4

TABLE 11

H05(main store): Load case 4103 on 12/12/84

Load (kg)				0	628	1259	1878	2497	1871	635	0
Ch	Run	Gauge		Microstrain							
7	1	27.4		0	66	131	194	260	192	65	1
	2			0	63	129	192	253	188	60	-1
8	1	27.1	*	0	57	116	173	234	175	60	1
	2			1	58	114	173	232	177	60	1
9	1	35A		0	25	59	104	160	133	46	2
	2			2	25	59	104	155	127	48	0
10	1	35B		0	8	20	39	59	51	17	0
	2			0	8	20	37	58	49	19	-2
11	1	35C		0	26	60	99	143	116	39	3
	2			2	27	61	99	140	114	39	-2
12	1	134T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
13	1	27		0	0	0	0	0	0	0	8
	2			0	0	0	0	0	0	0	0
14	1	28.1		0	62	130	198	273	208	70	2
	2			2	65	130	198	270	207	72	2
15	1	29		0	-3	-7	-10	-14	-10	-3	-2
	2			-2	-5	-7	-10	-14	-10	-5	-2
16	1	28.7	*	0	73	154	236	325	249	84	2
	2			0	75	154	237	321	248	84	2
17	1	31		0	-3	-2	-3	-7	-5	-2	-2
	2			2	-2	-2	-3	-5	-5	-2	-2
18	1	33	*	0	3	10	13	18	13	3	0
	2			0	5	8	15	20	13	7	0
19	1	134S		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
20	1	36A		0	56	118	186	261	204	70	3
	2			0	53	118	184	254	199	70	-2
21	1	36B		0	36	77	126	179	143	48	2
	2			0	34	77	126	174	140	48	-2
22	1	TEMP		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0

TABLE 11 (Continued)

H05(main store): Load case 4103 on 12/12/84

Ch	Run	Gauge		Load (kg) 0	628	1259	1878	2497	1871	635	0
				Microstrain							
23	1	4	*	0	5	11	16	21	17	6	0
	2			0	5	11	16	21	17	6	1
24	1	5		0	3	5	6	8	5	2	0
	2			0	3	5	6	8	5	3	1
25	1	6		0	0	0	-1	-3	-2	0	0
	2			0	0	-1	-2	-3	-3	-1	0
26	1	7		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
27	1	11		0	0	0	0	1	3	1	1
	2			0	0	0	0	1	2	1	0
28	1	12		0	-4	-5	-5	-5	-4	-2	0
	2			0	-3	-5	-5	-4	-2	-1	1
29	1	13		0	-1	-2	-1	-1	-2	-1	0
	2			0	-1	-1	-1	0	0	0	1
30	1	20	*	0	6	13	17	25	19	6	0
	2			0	5	13	19	25	21	6	0
31	1	21		0	5	11	19	27	21	5	-2
	2			-2	6	11	17	27	19	6	-2
32	1	24	*	0	9	19	29	41	31	10	0
	2			0	9	20	30	41	32	12	1
33	1	25	*	0	10	21	32	44	35	12	1
	2			0	10	20	32	44	34	12	1
34	1	21T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
35	1	37		0	88	185	290	401	313	106	3
	2			2	91	185	290	394	310	108	2
36	1	14		0	-1	-1	-2	-3	-2	-1	-1
	2			0	-1	-1	-1	-2	-1	-1	-1
37	1	38		0	98	206	318	437	334	112	2
	2			2	101	206	318	431	332	112	0
38	1	18A		0	0	0	0	0	0	0	0
	2			0	-2	0	0	0	0	0	0

TABLE 11 (Continued)

H05(main store): Load case 4103 on 12/12/84

Ch	Run	Gauge	Load (kg) 0	628	1259	1878	2497	1871	635	0
			Microstrain							
39	1	39	0	101	212	326	448	344	115	2
	2		2	102	210	326	443	342	116	0
40	1	22A	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
41	1	40	0	76	160	250	346	265	88	0
	2		0	77	160	250	341	264	90	0
42	1	21C	0	-4	-7	-10	-14	-11	-4	0
	2		0	-3	-7	-10	-12	-10	-4	0
43	1	16	0	-1	-2	-2	-3	-3	-2	-1
	2		-1	-2	-2	-3	-4	-3	-2	-1
44	1	324.3SB	0	128	267	402	547	419	142	3
	2		0	132	263	402	544	415	142	0
45	1	324.3PT	0	137	266	403	554	421	144	0
	2		0	130	266	407	544	418	144	0
46	1	43	0	0	0	0	0	0	0	0
	2		-1	-1	-1	-1	-1	-2	-1	-1
47	1	44	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0

* Sign reversed.

TABLE 12

H05(main store): Load case 4203 on 13/2/85

Ch	Run	Gauge		Load (kg) 0	615	1261	1862	2511	1894	615	0
				Microstrain							
7	1	27.4		0	65	131	197	264	197	62	0
	2			0	62	131	194	263	201	62	0
8	1	27.1	*	0	61	121	180	239	180	63	4
	2			4	61	122	178	241	188	62	6
9	1	35A		0	20	51	95	151	122	49	0
	2			0	25	56	95	155	129	51	0
10	1	35B		0	2	12	31	51	42	17	-5
	2			-5	3	15	29	53	44	17	-3
11	1	35C		0	20	49	87	131	102	39	-2
	2			-2	27	56	87	131	106	41	2
12	1	134T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
13	1	27		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
14	1	28.1		0	67	132	200	273	208	77	7
	2			7	68	137	200	277	217	77	8
15	1	29		0	-3	-3	-7	-8	-5	0	5
	2			5	0	-2	-3	-7	-3	3	7
16	1	28.7	*	0	80	159	239	325	249	87	7
	2			5	77	157	236	325	255	85	5
17	1	31		0	5	0	0	3	2	3	3
	2			5	7	7	2	3	2	2	7
18	1	33	*	0	10	13	18	22	17	8	3
	2			5	10	15	17	20	18	7	3
19	1	134S		0	-2	-2	-2	0	0	0	-2
	2			-2	-2	-2	0	0	0	0	0
20	1	36A		0	51	109	172	247	191	72	3
	2			3	56	112	172	250	198	75	5
21	1	36B		0	27	65	111	164	126	44	-5
	2			-5	29	67	108	164	130	44	-5
22	1	TEMP		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0

TABLE 12 (Continued)

H05(main store): Load case 4203 on 13/2/85

Ch	Run	Gauge		Load (kg) 0	615	1261	1862	2511	1894	615	0
				Microstrain							
23	1	4	*	0	6	11	16	21	16	6	0
	2			0	4	9	14	19	15	3	-3
24	1	5		0	1	3	5	7	5	1	-2
	2			-2	0	2	5	7	5	0	-2
25	1	6		0	-2	-2	-3	-4	-3	-2	-3
	2			-3	-2	-3	-3	-4	-3	-2	-3
26	1	7		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
27	1	11		0	-5	-4	-4	-5	-3	-3	-2
	2			-2	-3	-3	-3	-4	-2	-2	-2
28	1	12		0	-8	-9	-10	-10	-8	-6	-6
	2			-6	-8	-10	-11	-11	-10	-8	-7
29	1	13		0	-6	-6	-5	-4	-4	-4	-5
	2			-5	-5	-5	-5	-3	-3	-3	-3
30	1	20	*	0	6	13	21	29	22	10	3
	2			2	8	14	22	33	25	13	5
31	1	21		0	5	11	17	24	17	3	-5
	2			-5	2	10	14	22	16	2	-6
32	1	24	*	0	12	23	34	46	37	17	6
	2			6	14	24	35	48	39	19	8
33	1	25	*	0	14	24	36	47	37	16	3
	2			3	14	24	34	46	38	14	3
34	1	21T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
35	1	37		0	91	187	290	401	310	115	10
	2			8	94	190	286	403	320	111	10
36	1	14		0	-1	-1	-1	-1	-1	0	1
	2			1	1	0	-1	-1	0	1	2
37	1	38		0	105	210	320	438	332	119	9
	2			9	107	213	316	438	344	119	10
38	1	18A		0	-2	-2	-2	-2	-2	-2	0
	2			0	-2	-2	-2	0	0	0	0

TABLE 12 (Continued)

H05(main store): Load case 4203 on 13/2/85

Load (kg)			0	615	1261	1862	2511	1894	615	0
Ch	Run	Gauge	Microstrain							
39	1	39	0	108	214	326	446	340	123	9
	2		9	108	219	323	448	351	122	10
40	1	22A	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
41	1	40	0	81	163	251	344	264	95	7
	2		5	83	163	248	346	271	93	7
42	1	21C	0	-4	-7	-10	-12	-10	-4	1
	2		1	-1	-5	-8	-11	-10	-1	3
43	1	16	0	-1	-1	-2	-2	-2	0	1
	2		1	0	0	-1	-1	-1	1	2
44	1	324.3SB	0	138	270	409	554	426	152	17
	2		17	142	277	405	557	439	152	17
45	1	324.3PT	0	133	270	403	551	421	148	7
	2		7	133	270	400	551	428	151	7
46	1	43	0	0	0	0	0	-1	0	0
	2		0	0	-1	-1	-1	-1	-1	-1
47	1	44	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0

* Sign reversed.

TABLE 13

H05(main store): Load case 4303 on 27/3 85

Ch	Run	Gauge		Load (kg) 0	626	1268	1880	2492	1867	624	0
				Microstrain							
7	1	27.4		0	62	**	191	251	182	59	-3
	2			-4	60	122	185	248	181	59	-6
	3			-6	57	124	184	247	185	55	-7
8	1	27.1	*	0	55		172	230	169	55	-1
	2			-4	52	111	169	229	170	53	-5
	3			-5	51	109	167	225	172	52	-5
9	1	35A		0	29		112	163	133	48	-3
	2			-5	24	61	105	161	131	36	-5
	3			-5	20	63	112	155	127	44	-7
10	1	35B		0	10		42	63	51	19	-2
	2			-2	8	22	41	65	53	14	-2
	3			-2	7	24	42	59	49	17	-3
11	1	35C		0	32		118	165	129	44	-2
	2			0	31	72	116	169	136	34	-2
	3			-2	26	70	118	160	129	41	-5
12	1	134T		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
13	1	27		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
14	1	28.1		0	62		200	270	202	68	2
	2			0	63	132	202	275	208	67	2
	3			2	62	133	202	270	210	68	2
15	1	29	*	0	3		10	14	10	5	2
	2			3	7	10	14	17	15	8	5
	3			5	8	12	15	19	17	12	8
16	1	28.7	*	0	73		241	321	243	84	2
	2			0	75	155	237	321	246	80	2
	3			2	72	157	239	319	249	84	3
17	1	31		0	-5		-10	-11	-10	-8	-2
	2			-3	-3	-3	-7	-7	-5	-7	-5
	3			-5	-3	-7	-10	-13	-11	-10	-7
18	1	33	*	0	3		15	18	13	3	0
	2			0	7	13	17	22	17	5	0
	3			0	7	12	15	18	17	3	0

TABLE 13 (Continued)

HO5(main store): Load case 4303 on 27/3/85

Ch	Run	Gauge		Load (kg) 0	626	1268	1880	2492	1867	624	0
				Microstrain							
19	1	134S		0	0		0	2	2	2	0
	2			0	2	2	2	2	2	2	2
	3			2	2	3	3	5	3	2	2
20	1	36A		0	58		192	261	199	70	-2
	2			-2	55	119	187	259	199	60	-2
	3			-3	49	121	191	254	199	65	-7
21	1	36B		0	38		133	183	142	48	-2
	2			-3	36	82	131	183	142	41	-2
	3			-2	32	85	135	179	143	48	-2
22	1	TEMP		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
23	1	4	*	0	5		16	21	16	5	0
	2			0	4	10	15	20	16	5	-1
	3			-1	4	9	15	20	16	5	-1
24	1	5		0	2		6	8	5	3	2
	2			5	8	9	11	12	10	9	7
	3			7	10	11	12	15	13	10	9
25	1	6		0	0		-3	-6	-4	0	1
	2			2	2	0	-2	-5	-3	2	2
	3			2	2	0	-2	-4	-3	1	2
26	1	7		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
27	1	11		0	0		6	10	9	3	-1
	2			-2	-1	2	6	10	10	0	-1
	3			-1	-1	2	7	9	8	1	-2
28	1	12		0	-1		-6	-9	-7	-1	2
	2			5	3	0	-4	-6	-4	4	7
	3			7	5	1	-2	-4	-2	6	8
29	1	13		0	0		-7	-10	-9	-1	3
	2			6	5	1	-4	-8	-7	4	6
	3			6	5	1	-4	-7	-6	3	7
30	1	20	*	0	5		21	27	19	6	-2
	2			-5	2	8	14	21	14	0	-6
	3			-6	-2	6	13	19	13	0	-8

TABLE 13 (Continued)

HO5(main store): Load case 4303 on 27/3/65

Ch	Run	Gauge		Load (kg) 0	626	1268	1880	2492	1867	624	0
				Microstrain							
31	1	21		0	5		17	24	17	5	-2
	2			-5	2	8	14	22	17	2	-5
	3			-5	2	6	14	21	14	2	-5
32	1	24	*	0	8		30	40	30	8	-3
	2			-6	3	13	25	35	25	3	-8
	3			-8	1	12	23	32	23	1	-10
33	1	25	*	0	10		32	44	33	12	2
	2			1	12	23	33	46	37	14	2
	3			3	12	23	34	45	36	14	3
34	1	21T		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
35	1	37		0	88		296	401	305	104	2
	2			0	91	192	295	409	315	99	3
	3			2	88	194	300	401	315	108	3
36	1	14		0	0		-1	-1	-1	1	1
	2			2	1	1	1	0	0	1	1
	3			1	1	1	0	-1	-1	1	1
37	1	38		0	98		323	433	325	108	2
	2			3	105	215	325	440	335	108	5
	3			5	101	217	327	435	339	114	5
38	1	18A		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	-2	-2
39	1	39		0	101		332	445	333	113	3
	2			3	108	219	332	452	344	113	7
	3			5	104	222	335	446	349	118	7
40	1	22A		0	0		0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
41	1	40		0	77		258	350	264	90	2
	2			4	83	170	258	355	272	90	5
	3			5	81	172	264	351	276	95	7
42	1	21C		0	-1		-8	-11	-10	-3	1
	2			1	-1	-4	-8	-11	-8	-1	1
	3			1	-1	-4	-8	-11	-10	-3	0

TABLE 13 (Continued)

H05(main store): Load case 4303 on 27/3/85

Ch	Run	Gauge	Load (kg) 0	626	1268	1880	2492	1867	624	0
			Microstrain							
43	1	16	0	-1		-2	-3	-2	-1	0
	2		0	-1	-2	-2	-3	-2	-1	-1
	3		-1	-2	-2	-3	-4	-4	-3	-2
44	1	324.3SB	0	125		402	544	405	135	0
	2		0	128	267	402	554	419	132	3
	3		0	125	267	402	540	415	135	0
45	1	324.3PT	0	133		410	540	407	144	0
	2		0	133	263	400	536	403	140	0
	3		0	130	266	400	533	414	144	0
46	1	43	0	0		0	-1	0	0	0
	2		0	0	0	0	0	0	0	0
	3		0	0	0	0	0	0	0	0
47	1	44	0	0		0	0	0	0	0
	2		0	0	0	0	0	0	0	0
	3		0	0	0	0	0	0	0	0

* Sign reversed.

** Strain responses were not obtained for run 1, 50% m.c.1.

TABLE 14

H07(Sidewinder): Load case 2606-12 on 11/8/78

Ch	Run	Gauge	Load (kg)	0	465	925	1386	1842	1390	467	0
				Microstrain							
5	1	27.2		0	75	155	237	316	244	82	0
	2			0	74	155	234	316	243	81	0
6	1	27.3		0	53	110	168	225	175	61	0
	2			0	53	110	165	224	175	60	0
7	1	27.4		0	78	159	240	320	243	82	0
	2			0	78	160	238	321	241	80	0
8	1	27.5		0	17	42	69	94	78	26	0
	2			0	17	42	67	94	77	26	0
9	1	1.6SB		0	101	202	306	408	309	106	0
	2			0	101	204	305	409	309	103	0
10	1	2SB		0	84	170	258	345	264	92	1
	2			1	85	172	257	346	264	89	1
11	1	223SB		0	113	230	353	472	361	125	0
	2			0	114	232	352	473	362	123	0
12	1	320SB		0	177	365	551	733	556	193	1
	2			1	181	369	550	736	559	189	1
13	1	323.3SB		0	126	257	393	526	402	139	0
	2			0	127	259	392	526	403	136	0
14	1	326SB		0	110	230	356	481	372	130	0
	2			0	111	232	356	482	373	127	0
15	1	328SB		0	100	200	304	406	309	109	1
	2			1	101	202	303	407	309	106	1
16	1	28.2		0	85	178	274	367	285	95	0
	2			0	86	179	272	367	284	94	0
17	1	28.4		0	69	147	227	307	240	81	0
	2			0	69	147	225	307	239	80	0
18	1	28.5		0	69	144	220	294	228	79	0
	2			0	70	144	218	294	227	78	0
19	1	28.6		0	75	157	243	327	255	87	0
	2			0	76	157	240	327	255	85	0
20	1	28.7		0	79	161	247	331	255	87	0
	2			0	79	162	246	331	255	86	0

TABLE 14 (Continued)

HO7(Sidewinder): Load case 2606-12 on 11/8/78

	Load (kg)		0	465	925	1386	1842	1390	467	0
Ch	Run	Gauge				Microstrain				
21	1	28.8	0	64	131	199	267	205	69	0
	2		0	63	131	197	267	204	68	0
22	1	28.9	0	45	94	144	192	149	51	0
	2		0	46	94	144	192	149	50	0
23	1	28.10	0	42	85	131	172	134	44	0
	2		0	42	87	130	173	133	44	0
24	1	1.4SB	0	90	185	283	380	289	100	0
	2		0	92	187	282	381	289	98	0
25	1	16SB	0	144	297	452	601	459	158	0
	2		0	146	300	450	603	461	154	0
26	1	18PT	0	93	190	291	389	299	99	0
	2		0	93	192	288	389	298	98	0
27	1	27.1	0	65	131	202	271	208	72	0
	2		0	66	133	200	272	208	71	0
28	1	28.1	0	78	162	249	333	256	88	0
	2		0	80	164	249	334	257	87	0

TABLE 15

H07(Sidewinder): Load case 2606-45 on 14/8 78

Ch	Run	Gauge	Load (kg)	0	467	923	1386	1851	1379	465	0
				Microstrain							
5	4	27.2		0	75	152	233	313	238	81	0
	5			0	73	154	233	314	240	81	0
6	4	27.3		0	54	110	168	226	173	61	0
	5			0	54	110	167	226	173	60	0
7	4	27.4		0	79	159	239	321	239	83	1
	5			1	79	161	239	322	241	82	1
8	4	27.5		0	20	43	70	97	79	28	1
	5			1	19	43	70	97	79	27	1
9	4	1.6SB		0	104	207	313	417	312	105	0
	5			0	104	206	309	417	311	106	0
10	4	2SB		0	88	174	264	353	266	92	0
	5			0	87	174	261	353	266	92	0
11	4	223SB		0	118	236	360	482	365	126	1
	5			1	117	236	356	482	365	126	1
12	4	320SB		0	188	373	563	748	563	193	0
	5			0	184	374	558	751	564	194	0
13	4	323.3SB		0	130	262	400	535	405	139	0
	5			0	129	263	396	535	405	139	0
14	4	326SB		0	115	236	365	491	377	134	4
	5			4	117	238	363	493	377	132	4
15	4	328SB		0	104	204	309	413	311	108	0
	5			0	103	204	305	414	311	108	0
16	4	28.2		0	88	178	275	369	283	99	2
	5			2	88	181	274	370	285	99	2
17	4	28.4		0	71	145	225	306	237	84	3
	5			3	72	148	226	307	238	84	3
18	4	28.5		0	71	146	223	300	229	80	0
	5			0	71	147	221	300	229	79	0
19	4	28.6		0	78	157	244	329	254	89	0
	5			0	77	159	243	330	255	88	0
20	4	28.7		0	81	162	248	336	255	90	3
	5			3	81	164	247	336	256	90	3

TABLE 15 (Continued)

H07(Sidewinder): Load case 2606-45 on 14 8/78

	Load (kg)		0	467	923	1386	1851	1379	465	0
Ch	Run	Gauge				Microstrain				
21	4	28.8	0	65	129	199	267	204	72	1
	5		1	65	131	197	268	204	72	1
22	4	28.9	0	46	94	144	193	148	50	0
	5		0	46	94	142	193	149	51	0
23	4	28.10	0	44	85	131	175	131	42	3
	5		3	42	85	131	175	131	44	3
24	4	1.4SB	0	95	190	289	388	292	99	0
	5		0	94	190	285	388	292	99	0
25	4	16SB	0	150	303	459	612	462	157	0
	5		0	149	304	455	613	463	158	0
26	4	18PT	0	96	189	290	390	294	102	0
	5		0	94	191	290	390	297	100	0
27	4	27.1	0	66	131	202	273	206	71	0
	5		0	67	132	201	274	207	72	0
28	4	28.1	0	81	165	253	338	257	89	0
	5		0	81	166	251	339	259	89	0

TABLE 16

H07(Sidewinder): Load case 2706 on 18/12/78

Ch	Run	Gauge	Load (kg) 0	463	919	1383	1844	1386	463	0
			Microstrain							
5	1	27.2	0	72	152	229	309	236	81	0
	2		0	72	149	228	308	235	75	0
6	1	27.3	0	58	114	169	229	178	62	0
	2		0	57	111	169	229	176	60	0
7	1	27.4	0	78	159	237	320	240	82	0
	2		0	77	155	237	319	238	78	0
8	1	27.5	0	18	44	69	95	78	26	-2
	2		-2	17	42	66	94	74	17	-2
9	1	1.6SB	0	105	209	312	420	314	109	1
	2		1	106	206	313	420	317	107	1
10	1	2SB	0	88	176	263	356	268	92	0
	2		0	89	173	265	355	269	91	0
11	1	223SB	0	120	241	360	486	369	126	0
	2		0	119	236	361	486	371	125	0
12	1	320SB	0	186	371	551	742	554	189	0
	2		0	186	368	554	743	559	185	0
13	1	323.3SB	0	132	271	405	544	410	140	0
	2		0	134	265	405	543	414	137	0
14	1	326SB	0	122	252	375	504	385	131	1
	2		1	124	246	377	504	389	131	1
15	1	328SB	0	104	208	311	418	315	108	0
	2		0	103	203	311	417	319	107	0
16	1	28.2	0	86	178	270	366	284	100	3
	2		3	87	178	270	367	284	95	3
17	1	28.4	0	71	149	228	311	244	85	2
	2		2	73	148	229	311	243	82	2
18	1	28.5	0	75	155	232	314	243	85	0
	2		0	76	151	233	312	243	83	0
19	1	28.6	0	74	154	237	322	253	89	1
	2		1	74	153	237	321	253	82	1
20	1	28.7	0	81	166	252	342	263	92	1
	2		1	81	165	252	342	264	89	1

TABLE 16 (Continued)

H07(Sidewinder): Load case 270b on 18/12/78

Load (kg)			0	463	919	1353	1844	1386	463	0
Ch	Run	Gauge	Microstrain							
21	1	28.8	0	68	138	207	280	216	77	3
	2		3	69	136	205	280	215	74	3
22	1	25.9	0	45	94	142	191	148	51	0
	2		0	47	94	144	193	150	49	0
23	1	28.10	0	44	92	137	183	141	45	3
	2		3	47	91	138	183	140	47	3
24	1	1.4SB	0	97	194	291	394	297	101	1
	2		1	97	190	291	392	298	100	1
25	1	16SB	0	157	313	464	622	468	158	1
	2		1	156	309	464	621	472	156	1
26	1	18PT	0	89	184	279	376	289	99	0
	2		0	91	181	278	375	287	94	0
27	1	27.1	0	69	138	206	279	214	73	0
	2		0	69	134	206	277	214	73	0
28	1	28.1	0	84	172	258	350	268	94	1
	2		1	85	169	259	350	270	92	1

TABLE 17

H07(Sidewinder): Load case 2906 on 25/1/79

Ch	Run	Gauge	Load (kg) 0	467	919	1386	1776	1386	465	0
			Microstrain							
5	1	27.2	0	65	142	221	287	223	67	-10
	2		-10	61	137	217	285	221	67	-10
6	1	27.3	0	50	106	161	209	170	57	0
	2		0	50	104	163	209	171	58	0
7	1	27.4	0	77	155	233	300	232	77	0
	2		0	75	151	231	300	232	80	0
8	1	27.5	0	16	38	63	84	71	24	0
	2		0	16	38	63	84	71	24	0
9	1	1.6SB	0	103	208	311	397	314	107	0
	2		0	106	204	314	399	316	108	0
10	1	2SB	0	81	164	245	315	250	86	1
	2		1	84	162	248	316	251	87	1
11	1	223SB	0	112	226	337	431	344	118	2
	2		2	115	223	340	434	345	120	2
12	1	320SB	0	157	330	501	647	522	178	0
	2		0	159	322	503	649	522	178	0
13	1	323.3SB	0	118	239	357	458	365	129	3
	2		3	123	236	362	462	367	131	3
14	1	326SB	0	99	203	306	396	318	112	3
	2		3	103	199	310	397	319	113	3
15	1	328SB	0	99	198	294	376	299	102	2
	2		2	102	195	297	379	301	104	2
16	1	28.2	0	83	168	255	329	263	91	2
	2		2	84	167	257	331	264	93	2
17	1	28.4	0	69	140	215	280	225	78	1
	2		1	69	139	216	281	225	79	1
18	1	28.5	0	66	135	202	259	210	73	1
	2		1	68	132	204	261	211	74	1
19	1	28.6	0	71	146	225	291	233	80	2
	2		2	73	146	226	294	235	85	2
20	1	28.7	0	81	165	253	327	260	89	0
	2		0	83	165	255	330	263	92	0

TABLE 17 (Continued)

H07(Sidewinder): Load case 2906 on 25/1/79

	Load (kg)		0	467	919	1386	1776	1386	465	0
Ch	Run	Gauge				Microstrain				
21	1	28.8	0	65	134	201	262	208	72	0
	2		0	65	131	204	264	209	73	0
22	1	28.9	0	44	92	141	182	145	48	0
	2		0	44	90	141	181	145	47	0
23	1	28.10	0	42	84	128	164	129	43	0
	2		0	42	83	127	163	129	44	0
24	1	1.4SB	0	89	181	270	346	276	95	2
	2		2	92	177	273	349	278	98	2
25	1	16SB	0	132	270	404	517	412	143	1
	2		1	138	265	408	521	414	145	1
26	1	18PT	0	91	181	276	357	282	98	4
	2		4	92	181	277	362	286	105	4
27	1	27.1	0	66	132	198	255	202	70	1
	2		1	68	130	199	255	203	71	1
28	1	28.1	0	76	154	233	299	239	82	1
	2		1	78	152	234	299	239	82	1

TABLE 18

H07(Sidewinder): Load case 3506 on 2/12/81

Ch	Run	Gauge	Load (kg) 0	463	921	1386	1848	1390	463	0
			Microstrain							
4	1	323.5SB	0	121	248	386	528	407	138	-2
	2		-2	117	248	384	526	407	136	-4
5	1	223SB *	0	113	227	349	470	357	119	0
	2		0	108	227	349	470	359	119	0
6	1	1.6SB *	0	107	213	322	433	326	110	0
	2		0	104	212	322	433	328	108	0
7	1	2SB *	0	83	168	258	349	265	88	0
	2		0	81	168	259	350	268	88	0
8	1	325.1SB	0	168	345	531	725	555	186	0
	2		0	166	345	534	725	559	184	0
9	1	324.3SB	0	147	304	475	648	491	157	-14
	2		-17	131	292	463	636	484	145	-26
10	1	324.1SB	0	146	296	456	621	476	161	0
	2		0	141	296	459	621	478	159	0
11	1	324.4SB	0	137	278	425	577	438	147	-2
	2		-2	132	275	425	575	440	145	-2
12	1	323.3SB*	0	117	241	372	508	386	129	0
	2		0	112	241	374	508	388	126	0
13	1	323.1SB*	0	92	183	277	372	279	95	3
	2		3	91	184	278	372	282	95	4
14	1	324.4PT	0	142	282	428	577	441	148	-4
	2		-4	136	278	428	579	437	146	-4
15	1	323.5PT	0	129	265	410	556	429	147	-2
	2		-2	126	263	410	558	427	145	-6
16	1	18PT *	0	95	191	289	391	298	100	0
	2		-2	91	189	292	392	297	98	0
17	1	325.1PT	0	171	345	531	721	552	186	-2
	2		-2	164	340	533	721	547	181	-5
18	1	324.3PT	0	160	321	493	675	522	182	0
	2		0	156	319	496	680	522	179	0
19	1	324.1PT	0	153	305	465	631	484	168	0
	2		0	148	301	469	635	482	166	0

TABLE 15 (Continued)

HO7(Sidewinder): Load case 3506 on 2/12/81

	Load (kg)			0	463	921	1386	1848	1390	463	0
Ch	Run	Gauge		Microstrain							
20	1	28.6	*	0	76	160	248	338	264	91	2
	2			2	76	161	252	340	264	91	2
21	1	28.7	*	0	81	169	261	354	274	92	0
	2			0	79	169	262	354	274	91	0
22	1	27.1		0	68	136	207	280	213	72	0
	2			0	67	136	208	280	213	70	-1
23	1	27.4	*	0	80	157	237	320	243	82	2
	2			2	77	156	239	321	242	81	2
24	1	28.1		0	80	166	258	352	272	94	1
	2			2	81	168	261	352	274	93	1
25	1	25.2	*	0	86	179	276	373	291	99	1
	2			1	85	179	279	376	290	99	1
26	1	28.8	*	0	66	136	209	284	219	73	0
	2			0	63	133	209	284	218	71	-2
27	1	28.4	*	0	71	150	235	321	251	86	0
	2			1	70	151	237	322	251	86	1
28	1	1.4SB		0	82	162	247	334	253	85	0
	2			0	79	162	247	332	255	85	-2
29	1	16TSB		0	145	293	447	603	457	152	-2
	2			-2	141	293	449	603	462	152	-2

* Sign reversed.

TABLE 19

H07(Sidewinder): Load case 3606 on 8/7/82

	Load (kg)		0	483	919	1382	1849	1389	469	0
Ch	Run	Gauge				Microstrain				
4	1	323.5SB	0	127	269	417	572	442	148	0
	2		0	131	267	415	576	442	154	0
	3		0	127	267	415	569	436	152	0
5	1	223SB	0	117	236	359	485	370	123	0
	2		0	119	236	359	487	370	130	0
	3		0	117	236	359	485	368	126	0
6	1	1.6TSB	0	107	213	317	427	322	110	0
	2		0	108	212	317	430	322	114	0
	3		0	105	212	317	427	320	111	0
7	1	2TSB	0	88	177	269	360	276	94	0
	2		1	90	177	268	363	276	98	1
	3		1	88	178	268	360	273	95	1
8	1	325.1SB	0	182	371	564	753	573	186	0
	2		0	184	368	562	755	571	193	0
	3		0	177	368	562	751	566	189	0
9	1	324.3SB	0	161	335	515	700	536	176	0
	2		0	164	332	513	702	534	183	-2
	3		-2	159	332	510	695	527	178	-5
10	1	324.1SB	0	152	311	476	647	495	165	0
	2		0	154	311	474	651	495	171	0
	3		0	152	311	474	645	491	169	0
11	1	324.4SB	0	141	284	431	585	444	150	0
	2		0	143	284	431	590	444	156	0
	3		0	139	286	431	585	442	154	0
12	1	323.3SB	0	126	260	396	536	410	138	0
	2		0	131	260	396	539	410	143	0
	3		0	126	260	393	534	407	143	0
13	1	323.1SB	0	92	180	267	358	268	91	0
	2		1	92	180	268	359	268	94	1
	3		1	91	180	268	358	267	92	1
14	1	324.4PT	0	142	280	433	583	443	148	0
	2		2	142	282	430	583	441	153	2
	3		2	140	284	430	583	441	148	2
15	1	323.5PT	0	135	272	429	580	446	147	0
	2		0	133	274	425	580	442	151	-2
	3		-2	131	274	425	580	442	149	-2

TABLE 19 (Continued)

H07(Sidewinder): Load case 3606 on 8/7/82

Ch	Run	Gauge	Load (kg) 0	483	919	1382	1849	1389	469	0
			Microstrain							
16	1	18TPT	0	98	195	303	406	310	103	0
	2		0	98	197	301	406	309	106	0
	3		0	97	197	301	407	309	103	0
17	1	325.1PT	0	176	356	555	743	567	183	0
	2		0	173	356	551	743	565	187	-2
	3		-2	171	356	551	745	562	183	-2
18	1	324.3PT	0	160	326	514	699	538	175	0
	2		0	160	328	512	699	533	182	0
	3		0	156	328	510	699	533	179	-2
19	1	324.1PT	0	153	305	476	646	493	161	0
	2		-2	151	308	473	644	489	166	-2
	3		-2	148	308	473	646	489	164	-2
20	1	28.6	0	83	170	266	359	278	90	0
	2		0	84	172	265	360	277	94	0
	3		0	82	172	265	360	277	93	0
21	1	28.7	0	82	170	262	357	275	91	0
	2		0	84	170	262	359	274	94	-1
	3		-1	81	170	261	357	272	92	-1
22	1	27.1	0	70	137	211	284	215	72	0
	2		1	69	137	210	284	215	74	0
	3		0	68	137	210	282	213	72	-1
23	1	27.4	0	77	153	236	320	244	82	0
	2		0	76	154	235	320	243	84	0
	3		0	76	155	235	319	241	82	0
24	1	28.1	0	85	176	270	362	279	93	0
	2		0	87	176	269	364	278	96	0
	3		0	85	177	269	362	277	95	1
25	1	28.2	0	92	188	295	395	305	99	0
	2		1	93	190	293	396	304	102	1
	3		1	91	191	293	396	303	101	1
26	1	28.8	0	67	137	212	287	221	75	0
	2		0	67	137	210	287	221	77	0
	3		0	65	136	210	286	219	75	-1
27	1	28.4	0	77	156	244	330	256	85	0
	2		1	78	156	243	331	255	87	1
	3		1	74	157	243	331	254	87	2

TABLE 19 (Continued)

H07(Sidewinder): Load case 3606 on 8/7/82

	Load (kg)		0	483	919	1382	1849	1389	469	0
Ch	Run	Gauge				Microstrain				
28	1	1.4TSB	0	83	167	252	337	256	88	0
	2		0	85	165	250	338	256	90	0
	3		0	82	167	250	337	255	88	0
29	1	27.2	0	75	151	237	320	249	82	0
	2		2	75	153	237	323	247	86	2
	3		2	73	153	237	320	247	84	2

TABLE 20

H07(Sidewinder): Load case 4106 on 12/12/84

Load (kg)				0	465	919	1383	1842	1388	465	0
Ch	Run	Gauge		Microstrain							
7	1	27.4		0	83	158	238	319	237	82	0
8	1	27.1	*	0	68	134	205	278	211	72	0
9	1	35A		0	36	83	136	201	165	58	2
10	1	35B		0	14	36	59	92	75	25	0
11	1	35C		0	36	82	135	192	155	49	0
12	1	134T		0	0	0	0	0	0	0	0
13	1	27		0	0	0	0	0	0	0	0
14	1	28.1		0	82	165	255	347	272	93	2
15	1	29		0	-3	-5	-8	-12	-8	-2	2
16	1	28.7	*	0	80	164	253	347	267	91	0
17	1	31		0	3	2	-2	0	2	3	2
18	1	33		0	-5	-8	-10	-17	-12	-5	0
19	1	134S		0	0	2	2	2	2	0	0
20	1	36A		0	68	145	230	315	249	85	2
21	1	36B		0	46	102	162	227	179	61	0
22	1	TEMP		0	0	0	0	0	0	0	0
23	1	4		0	-2	-3	-5	-6	-4	-1	1
24	1	5		0	4	6	9	10	7	2	0
25	1	6		0	2	4	4	5	3	1	0
26	1	7		0	0	0	0	0	0	0	0
27	1	11		0	-3	-5	-7	-7	-3	0	1
28	1	12		0	0	0	0	0	0	-1	-1
29	1	13		0	3	6	7	8	6	2	1
30	1	20	*	0	5	10	16	21	16	6	2

TABLE 20 (Continued)

H07(Sidewinder): Load case 4106 on 12/12/84

Load (kg)				0	465	919	1383	1842	1389	465	0
Ch	Run	Gauge		Microstrain							
31	1	21		0	6	11	16	21	17	8	2
32	1	24	*	0	6	12	20	28	22	8	1
33	1	25	*	0	7	14	20	29	23	9	1
34	1	21T		0	0	0	0	0	0	0	0
35	1	37		0	94	195	305	424	332	116	3
36	1	14		0	0	0	0	0	0	1	2
37	1	38		0	108	222	342	472	365	122	0
38	1	18A		0	-2	-2	-2	-2	0	0	0
39	1	39		0	111	229	353	481	373	127	2
40	1	22A		0	0	0	0	0	0	0	0
41	1	40		0	81	169	264	366	283	95	2
42	1	21C		0	-3	-5	-7	-10	-8	-3	1
43	1	16		0	0	-1	-1	-1	-1	1	1
44	1	324.3SB		0	162	324	500	689	537	186	7
45	1	324.3PT		0	162	328	508	695	533	180	0
46	1	43		0	0	-1	0	-1	-1	-1	-1
47	1	44		0	0	0	0	0	0	0	0

* Sign reversed.

TABLE 21

H07(Sidewinder): Load case 4206 on 13/2/85

Ch	Run	Gauge		Load (kg) 0	460	934	1377	1848	1381	474	0
				Microstrain							
7	1	27.4		0	83	161	238	326	246	82	0
	2			0	79	165	243	326	243	82	-3
8	1	27.1	*	0	70	138	208	282	214	70	-1
	2			-2	63	140	208	278	210	71	-2
9	1	35A		0	29	65	122	178	144	53	-8
	2			-8	24	65	116	175	138	44	-14
10	1	35B		0	7	20	48	73	59	19	-8
	2			-8	5	22	44	71	56	15	-12
11	1	35C		0	26	60	109	165	126	41	-12
	2			-12	22	63	109	162	123	36	-14
12	1	134T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
13	1	27		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
14	1	28.1		0	83	165	253	350	273	95	3
	2			2	78	172	257	350	270	97	2
15	1	29		0	0	-3	-5	-8	-5	0	2
	2			2	0	-3	-5	-7	-7	0	2
16	1	28.7	*	0	85	166	253	347	267	96	3
	2			3	80	169	255	347	265	96	2
17	1	31		0	-5	-2	0	-2	0	-3	-2
	2			-2	-3	-2	-2	-5	-2	-2	-2
18	1	33		0	-3	-8	-13	-15	-12	-3	-2
	2			-2	-5	-8	-13	-15	-13	-5	-2
19	1	134S		0	-2	-2	-2	-2	-3	-2	-3
	2			-3	-2	-2	-2	0	-2	-2	-3
20	1	36A		0	63	128	209	295	228	85	-2
	2			-3	63	133	209	293	225	78	-9
21	1	36B		0	36	80	140	201	155	53	-10
	2			-10	34	82	138	201	152	48	-15
22	1	TEMP		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0

TABLE 21 (Continued)

H07(Sidewinder): Load case 4206 on 13/2/85

Load (kg)				0	460	934	1377	1848	1381	474	0
Ch	Run	Gauge		Microstrain							
23	1	4		0	-3	-4	-5	-6	-4	-2	-2
	2			-2	-3	-3	-4	-5	-4	-2	-1
24	1	5		0	2	6	9	12	9	3	-1
	2			-1	2	6	9	13	9	3	-1
25	1	6		0	-1	2	3	6	3	-1	-4
	2			-4	-1	2	4	6	4	-1	-3
26	1	7		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
27	1	11	*	0	10	15	18	23	18	9	5
	2			6	10	15	19	23	18	10	6
28	1	12		0	-19	-17	-16	-13	-14	-19	-21
	2			-21	-19	-16	-14	-12	-13	-18	-19
29	1	13		0	-2	3	8	14	9	-1	-6
	2			-6	0	6	10	16	12	2	-3
30	1	20	*	0	6	10	14	19	14	6	0
	2			2	6	11	14	21	14	6	2
31	1	21		0	2	6	11	16	11	2	-3
	2			-3	0	6	10	13	10	0	-5
32	1	24	*	0	10	15	23	31	25	12	4
	2			4	10	17	24	32	26	12	5
33	1	25	*	0	10	18	26	34	28	14	5
	2			5	12	20	27	35	29	14	6
34	1	21T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
35	1	37		0	96	190	300	418	325	118	3
	2			2	91	199	301	416	323	115	2
36	1	14		0	-1	-1	-1	-1	0	1	1
	2			1	1	1	1	1	1	3	3
37	1	38		0	108	217	337	465	358	122	-2
	2			0	103	224	339	463	354	122	-2
38	1	18A		0	-3	-3	-2	-2	-2	-2	-2
	2			-2	-3	-2	-2	-2	-2	-2	-2

TABLE 21 (Continued)

H07(Sidewinder): Load case 4206 on 13/2/85

Ch	Run	Gauge	Load (kg) 0	460	934	1377	1848	1381	474	0
			Microstrain							
39	1	39	0	113	222	344	474	366	129	2
	2		2	106	231	346	472	363	129	2
40	1	22A	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
41	1	40	0	83	165	258	360	279	98	2
	2		2	81	170	260	360	278	100	2
42	1	21C	0	-1	-4	-7	-10	-7	-1	1
	2		1	-1	-3	-5	-8	-5	-1	3
43	1	16	0	-1	-1	-2	-2	-1	-1	0
	2		0	0	-1	-1	-1	-1	0	1
44	1	324.3SB	0	159	321	503	689	537	179	0
	2		0	149	334	503	682	527	179	-3
45	1	324.3PT	0	173	324	493	688	529	187	-4
	2		-4	158	328	500	691	529	187	-4
46	1	43	0	-1	-1	-1	-1	-1	-1	-1
	2		-1	-1	-1	-1	-1	0	0	0
47	1	44	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0

* Sign reversed.

TABLE 22

H07(Sidewinder): Load case 4306 on 28/3/85

Ch	Run	Gauge		Load (kg) 0	467	934	1395	1844	1395	465	0
				Microstrain							
7	1	27.4		0	79	158	237	320	243	83	1
	2			1	79	162	241	322	244	83	3
	3			3	85	161	244	320	244	85	4
8	1	27.1	*	0	65	132	203	276	209	71	1
	2			1	66	137	205	276	210	72	2
	3			2	71	137	206	275	211	73	4
9	1	35A		0	37	88	141	204	165	59	0
	2			0	39	90	144	204	167	59	0
	3			0	39	90	144	202	165	58	2
10	1	35B		0	15	37	65	95	78	25	-2
	2			-2	15	39	65	93	78	25	-2
	3			-2	15	37	65	92	75	24	-2
11	1	35C		0	43	97	153	216	174	60	0
	2			0	41	97	153	215	174	58	-2
	3			-2	41	95	153	213	170	56	-2
12	1	134T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
13	1	27		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
14	1	28.1		0	77	160	247	337	260	87	0
	2			0	78	165	250	337	262	88	0
	3			0	82	163	252	335	262	87	0
15	1	29		0	-2	-5	-7	-10	-7	2	5
	2			5	2	-2	-3	-5	-2	5	8
	3			8	5	3	0	-2	2	8	12
16	1	28.7	*	0	79	166	253	345	265	91	0
	2			0	79	167	255	343	265	89	0
	3			-2	80	164	253	340	261	85	-3
17	1	31		0	-2	-3	-2	-2	-3	-2	0
	2			0	2	-2	-2	-2	-2	0	2
	3			2	2	0	0	0	0	2	2
18	1	33	*	0	-7	-10	-17	-22	-17	-8	-2
	2			-2	-8	-12	-17	-22	-17	-8	-2
	3			-2	-8	-13	-18	-22	-18	-8	-2

TABLE 22 (Continued)

HO7(Sidewinder): Load case 4306 on 28 3/85

Ch	Run	Gauge	Load (kg)	0	467	934	1395	1844	1395	465	0
				Microstrain							
19	1	134S		0	2	2	0	0	2	0	0
	2			0	0	0	0	0	0	0	-2
	3			-2	-2	0	0	0	0	0	0
20	1	36A		0	72	153	237	322	255	89	2
	2			2	72	158	240	324	255	89	3
	3			3	75	157	242	322	255	89	5
21	1	36B		0	49	109	169	232	184	61	0
	2			0	48	111	171	234	184	61	0
	3			0	49	109	172	230	183	60	0
22	1	TEMP		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
23	1	4		0	-1	-2	-4	-6	-4	1	2
	2			3	1	0	-2	-4	-2	2	5
	3			5	3	1	0	-2	0	4	6
24	1	5		0	4	5	6	7	4	1	-1
	2			-1	3	5	6	6	4	1	-1
	3			-1	2	3	5	6	3	1	-1
25	1	6		0	2	3	3	3	2	1	0
	2			0	3	3	4	3	2	1	0
	3			0	3	3	4	4	2	2	1
26	1	7		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
27	1	11		0	-4	-6	-7	-7	-4	-1	1
	2			1	-3	-5	-6	-6	-3	0	2
	3			2	-2	-3	-5	-5	-2	1	3
28	1	12		0	2	3	3	3	2	-1	-2
	2			-2	0	0	1	0	-1	-3	-5
	3			-5	-2	-2	-1	-2	-3	-5	-7
29	1	13		0	5	8	9	9	6	2	0
	2			0	5	7	9	9	6	2	-1
	3			-1	5	6	8	9	6	2	-1
30	1	20	*	0	5	11	16	22	19	8	3
	2			3	8	14	19	25	21	11	5
	3			5	10	14	21	27	22	13	6

TABLE 22 (Continued)

H07(Sidewinder): Load case 4306 on 28/3/85

Load (kg)				0	467	934	1395	1844	1395	465	0
Ch	Run	Gauge		Microstrain							
31	1	21		0	5	10	14	21	16	5	0
	2			0	5	8	14	19	14	3	-2
	3			-2	3	6	13	17	13	2	-3
32	1	24	*	0	6	13	21	28	23	7	-1
	2			-1	5	12	20	28	21	6	-1
	3			-1	4	12	20	28	21	6	-1
33	1	25	*	0	6	14	21	29	23	8	0
	2			0	7	14	22	29	23	8	1
	3			1	8	14	22	29	23	8	0
34	1	21T		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
35	1	37		0	93	199	310	428	333	113	0
	2			0	93	202	312	424	333	113	0
	3			-2	96	200	313	423	330	109	0
36	1	14		0	0	-1	-1	-1	-1	0	1
	2			1	1	1	1	1	1	1	2
	3			2	2	2	1	1	1	2	3
37	1	38		0	105	222	342	466	358	117	-3
	2			-2	103	225	342	465	358	117	-3
	3			-3	107	222	344	461	354	114	-3
38	1	18A		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	2
39	1	39		0	108	226	349	474	365	122	-2
	2			-2	106	231	351	474	366	120	-3
	3			-3	109	227	351	471	363	118	-3
40	1	22A		0	0	0	0	0	0	0	0
	2			0	0	0	0	0	0	0	0
	3			0	0	0	0	0	0	0	0
41	1	40		0	79	170	265	366	281	91	-4
	2			-4	77	172	265	364	281	91	-5
	3			-5	79	169	265	359	278	88	-7
42	1	21C		0	-3	-4	-7	-10	-7	-3	1
	2			1	-1	-4	-7	-8	-7	-1	1
	3			1	0	-3	-5	-8	-5	0	3

TABLE 22 (Continued)

H07(Sidewinder): Load case 4306 on 28/3/85

Ch	Run	Gauge	Load (kg) 0	467	934	1395	1844	1395	465	0
			Microstrain							
43	1	16	0	0	0	-1	-1	0	1	2
	2		2	2	2	1	1	2	4	4
	3		5	4	4	4	3	4	5	6
44	1	324.3SB	0	149	311	490	676	520	176	0
	2		0	152	321	493	672	524	176	0
	3		0	159	321	497	669	520	172	0
45	1	324.3PT	0	158	320	486	666	522	180	0
	2		0	151	324	493	673	518	180	0
	3		-4	162	317	493	662	515	176	0
46	1	43	0	0	0	0	-1	-1	-1	-1
	2		-1	-1	-1	-1	-1	-1	-1	-1
	3		-1	-2	-2	-2	-2	-2	-2	-2
47	1	44	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
	3		0	0	0	0	0	0	0	0

* Sign reversed.

TABLE 23

H05(main store): Load case 2b03-3 on 11/8/78

Load (kg)			624	1254	1857	2488	1864	633
Ch	Run	Gauge	Microstrain/1000 kg					
5	3	27.2	91	100	101	102	105	104
6	3	27.3	75	78	80	81	84	85
7	3	27.4	101	104	104	105	104	104
8	3	27.5	13	18	20	21	24	21
9	3	1.6SB	157	157	160	162	164	164
10	3	2SB	123	124	125	127	128	130
11	3	223SB	162	162	165	166	170	171
12	3	320SB	135	139	145	147	150	147
13	3	323.3SB	178	179	183	184	188	190
14	3	326SB	138	138	143	144	147	149
15	3	328SB	141	142	143	144	146	149
16	3	28.2	109	115	117	118	121	119
17	3	28.4	90	96	99	100	104	103
18	3	28.5	91	94	97	98	101	103
19	3	28.6	99	104	107	109	112	112
20	3	28.7	115	120	122	123	126	128
21	3	28.8	95	98	99	100	102	103
22	3	28.9	55	59	60	61	62	62
23	3	28.10	50	53	54	54	55	49
24	3	1.4SB	128	132	135	136	139	137
25	3	16SB	204	206	211	211	215	213
26	3	18PT	131	137	139	141	143	141
27	3	27.1	88	90	91	92	94	93
28	3	28.1	98	101	104	105	107	107

TABLE 24

H05(main store): Load case 2603-56 on 14/8/78

Ch	Run	Gauge	Load (kg)	630	1254	1878	2499	1871	628
				Microstrain/1000 kg					
5	5	27.2		92	98	101	102	104	103
	6			92	98	100	102	104	102
6	5	27.3		75	78	79	80	83	81
	6			67	74	77	78	80	78
7	5	27.4		102	102	103	104	103	102
	6			98	101	102	103	102	99
8	5	27.5		13	18	20	21	24	21
	6			8	16	19	20	22	18
9	5	1.6SB		160	159	162	163	164	164
	6			151	157	160	161	162	162
10	5	2SB		127	124	126	126	128	129
	6			117	123	124	125	126	127
11	5	223SB		163	163	166	166	168	169
	6			157	162	163	166	167	169
12	5	320SB		133	138	144	145	149	145
	6			127	138	143	145	148	146
13	5	323.3SB		181	180	183	185	187	188
	6			174	180	182	184	187	189
14	5	326SB		136	137	142	143	145	145
	6			130	136	140	142	144	145
15	5	328SB		144	142	144	144	145	146
	6			136	140	142	143	144	145
16	5	28.2		109	113	116	118	120	119
	6			109	115	117	118	121	121
17	5	28.4		86	91	94	96	99	97
	6			82	90	93	96	98	99
18	5	28.5		95	95	99	99	102	102
	6			90	95	97	98	101	103
19	5	28.6		98	103	107	108	111	111
	6			98	104	106	108	111	111
20	5	28.7		117	121	123	124	127	129
	6			111	118	121	123	126	124

TABLE 24 (Continued)

HO5(main store): Load case 2603-56 on 14/5/78

Load (kg)			630	1254	1878	2499	1871	628
Ch	Run	Gauge	Microstrain/1000 kg					
21	5	28.8	95	96	99	100	102	103
	6		89	95	97	99	100	100
22	5	28.9	59	60	62	62	64	65
	6		62	63	63	64	65	68
23	5	28.10	54	57	57	57	58	54
	6		59	58	58	58	59	59
24	5	1.4SB	133	133	136	137	138	138
	6		125	132	134	136	137	138
25	5	16SB	206	207	211	211	214	212
	6		200	207	209	211	213	215
26	5	18PT	133	136	138	140	142	142
	6		132	136	138	140	142	140
27	5	27.1	89	89	91	91	92	91
	6		86	89	89	90	91	89
28	5	28.1	98	100	104	105	106	107
	6		100	103	104	106	107	111

TABLE 25

HOS(main store): Load case 2703 on 18/12 78

Load (kg)			624	1245	1869	2490	1862	628
Ch	Run	Gauge	Microstrain/1000 kg					
5	1	27.2	90	96	99	101	101	103
	2		93	95	98	100	101	100
6	1	27.3	74	77	80	81	83	84
	2		74	77	79	80	82	81
7	1	27.4	101	101	104	106	104	102
	2		99	101	103	104	103	100
8	1	27.5	13	18	18	20	22	19
	2		6	16	18	19	20	18
9	1	1.6SB	164	161	162	163	166	169
	2		165	161	163	163	164	167
10	1	2SB	128	127	127	129	129	131
	2		130	128	127	128	129	129
11	1	223SB	168	166	167	169	171	174
	2		172	167	169	169	171	174
12	1	320SB	139	145	147	149	150	150
	2		149	145	148	149	150	151
13	1	323.3SB	200	195	195	195	201	215
	2		165	172	178	181	180	162
14	1	326SB	144	146	149	150	150	154
	2		151	147	149	149	151	156
15	1	328SB	148	145	145	147	148	150
	2		151	144	146	146	147	150
16	1	28.2	111	114	116	118	120	124
	2		114	114	117	118	121	124
17	1	28.4	90	94	98	100	103	105
	2		95	95	98	100	103	107
18	1	28.5	99	99	102	104	105	108
	2		101	100	102	103	106	111
19	1	28.6	98	103	105	108	110	115
	2		99	102	105	107	110	115
20	1	28.7	114	120	123	126	128	131
	2		119	120	124	126	128	131

TABLE 25 (Continued)

H05(main store): Load case 2703 on 18/12/78

Ch	Run	Gauge	Load (kg) 624	1245	1869	2490	1862	628
			Microstrain/1000 kg					
21	1	28.8	99	101	103	104	107	111
	2		103	102	103	105	107	111
22	1	28.9	56	58	59	60	61	64
	2		63	59	60	60	62	64
23	1	28.10	53	57	57	57	57	56
	2		58	57	58	59	59	57
24	1	1.4SB	138	137	138	140	141	142
	2		139	137	139	139	141	142
25	1	16SB	216	214	215	216	218	216
	2		221	214	216	216	216	220
26	1	18PT	128	132	134	136	136	143
	2		131	132	134	136	137	140
27	1	27.1	88	90	92	93	94	94
	2		91	91	92	92	94	92
28	1	28.1	104	106	108	110	112	113
	2		107	107	109	110	112	116

TABLE 26

H05(main store): Load case 2803 on 19/12/78

Load (kg)			633	1245	1873	2499	1873	628
Ch	Run	Gauge	Microstrain/1000 kg					
5	1	27.2	84	92	96	98	100	96
	2		85	93	96	99	99	94
6	1	27.3	71	76	79	80	82	81
	2		71	76	78	80	82	80
7	1	27.4	103	102	104	105	104	105
	2		104	104	104	105	104	103
8	1	27.5	14	18	20	20	24	24
	2		13	18	19	20	23	21
9	1	1.6SB	160	161	163	162	164	167
	2		158	161	162	164	164	166
10	1	2SB	123	126	128	127	128	131
	2		123	126	127	128	128	129
11	1	223SB	163	165	168	167	169	174
	2		161	165	167	169	170	170
12	1	320SB	134	141	145	146	147	151
	2		136	143	145	147	147	145
13	1	323.3SB	179	183	186	186	188	193
	2		177	183	186	188	188	188
14	1	326SB	141	145	147	147	149	153
	2		141	145	146	149	149	150
15	1	328SB	142	144	146	145	146	151
	2		142	145	145	146	147	148
16	1	28.2	111	112	115	117	121	123
	2		111	114	115	118	121	121
17	1	28.4	92	94	98	99	102	105
	2		90	95	98	100	102	105
18	1	28.5	95	98	102	102	105	108
	2		95	98	101	103	105	107
19	1	28.6	100	102	105	107	110	115
	2		100	103	105	108	110	113
20	1	28.7	117	120	123	125	129	131
	2		115	121	123	126	129	131

TABLE 26 (Continued)

H05(main store): Load case 2803 on 19/12/78

Load (kg)			633	1245	1873	2499	1873	628
Ch	Run	Gauge	Microstrain/1000 kg					
21	1	28.8	96	99	102	103	106	110
	2		96	100	102	104	106	110
22	1	28.9	57	59	60	60	61	62
	2		55	59	60	60	62	62
23	1	28.10	57	58	58	58	59	57
	2		57	59	59	58	59	60
24	1	1.4SB	133	136	139	138	140	143
	2		133	136	138	140	140	140
25	1	16SB	210	214	216	214	216	220
	2		209	214	215	216	216	215
26	1	18PT	130	130	133	135	138	142
	2		133	133	133	136	138	142
27	1	27.1	90	92	92	93	95	97
	2		90	92	92	94	94	96
28	1	28.1	101	104	107	108	110	113
	2		101	105	107	109	110	111

TABLE 27

HO5(main store): Load case 2903 on 25/1/79

Load (kg)			630	1247	1867	2495	1869	629
Ch	Run	Gauge	Microstrain/1000 kg					
5	1	27.2	90	95	98	100	101	99
	2		90	95	99	101	102	103
6	1	27.3	75	77	78	79	83	89
	2		78	79	81	80	83	89
7	1	27.4	102	103	102	104	102	103
	2		105	103	104	105	104	107
8	1	27.5	13	16	18	20	22	21
	2		11	16	18	19	20	19
9	1	1.6SB	155	156	157	157	161	169
	2		157	158	160	158	160	164
10	1	2SB	121	120	121	121	123	127
	2		122	121	123	121	123	124
11	1	223SB	159	160	160	160	163	172
	2		163	161	163	161	163	167
12	1	320SB	113	119	123	125	131	138
	2		113	119	124	125	128	131
13	1	323.3SB	170	174	182	175	182	210
	2		192	182	181	180	185	209
14	1	326SB	130	130	130	131	134	145
	2		133	131	132	131	134	140
15	1	328SB	138	138	139	139	141	146
	2		140	139	141	139	141	142
16	1	28.2	106	110	112	114	117	121
	2		111	112	114	115	116	119
17	1	28.4	90	95	96	98	102	108
	2		94	96	98	99	101	105
18	1	28.5	92	93	94	95	97	103
	2		94	94	95	95	97	99
19	1	28.6	97	100	102	105	107	111
	2		100	102	103	105	106	108
20	1	28.7	121	124	126	128	132	138
	2		125	125	128	128	132	135

TABLE 27 (Continued)

H05(main store): Load case 2903 on 25/1/79

Ch	Run	Gauge	Load (kg) 630	1247	1867	2495	1869	628
			Microstrain/1000 kg					
21	1	28.8	97	100	101	103	105	110
	2		98	101	103	103	105	105
22	1	28.9	57	59	61	61	64	68
	2		59	60	61	61	63	65
23	1	28.10	49	52	53	54	55	56
	2		51	53	53	55	55	56
24	1	1.4SB	124	126	126	127	131	138
	2		128	127	129	128	131	134
25	1	16SB	190	191	193	193	199	209
	2		195	194	197	194	197	202
26	1	18PT	128	128	131	133	134	137
	2		130	129	131	134	134	140
27	1	27.1	90	90	90	91	93	97
	2		92	91	92	91	93	96
28	1	28.1	97	100	101	102	105	111
	2		103	102	103	103	104	108

TABLE 28

H05(main store): Load case 3401 on 10/11/81

Ch	Run	Gauge	Load (kg)	474	903	1365	1835	1393	426
				Microstrain/1000 kg					
4	1	323.5SB		139	150	152	160	157	145
5	1	223SB		148	158	161	164	158	155
6	1	1.6SB		141	154	157	161	154	136
7	1	2SB		116	122	123	126	122	115
8	1	325.1SB		203	218	225	233	226	211
9	1	324.3SB		186	198	204	210	204	188
10	1	324.1SB		186	199	205	211	205	195
11	1	324.4SB		190	199	205	211	205	188
12	1	323.3SB		152	164	167	170	168	157
13	1	323.1SB		131	141	144	147	141	131
14	1	324.4PT		219	208	207	208	217	239
15	1	323.5PT		179	170	171	172	180	199
16	1	18PT		141	135	136	137	143	152
17	1	325.1PT		238	228	228	228	239	265
18	1	324.3PT		215	206	205	207	216	239
19	1	324.1PT		222	208	208	209	219	242
20	1	28.6		105	102	103	106	110	117
21	1	28.7		116	123	127	129	131	129
22	1	27.1		84	85	88	89	88	84
23	1	27.4		101	100	100	99	98	106
24	1	28.1		97	102	103	106	104	101
25	1	28.2		118	115	116	117	121	131
26	1	28.8		99	101	103	105	107	110
27	1	28.4		93	94	97	99	102	103

TABLE 28 (Continued)

H05(main store): Load case 3403 on 10/11/81

Load (kg)			474	903	1365	1835	1393	426
Ch	Run	Gauge	Microstrain/1000 kg					
28	1	1.4SB	105	112	113	115	112	108
29	1	16TSB	184	195	199	203	199	185

TABLE 29

HO5(main store): Load case 3503 on 2/12/81

Ch	Run	Gauge	Load (kg)	637	1254	1876	2495	1871	635
				Microstrain/1000 kg					
4	1	323.5SB		179	174	175	179	181	180
	2			169	175	176	180	182	176
5	1	223SB		163	160	165	164	166	170
	2			157	163	165	165	168	167
6	1	1.6SB		163	160	164	163	165	170
	2			158	162	164	164	166	168
7	1	2SB		121	122	125	126	126	126
	2			118	122	126	126	128	126
8	1	325.1SB		231	230	236	236	239	246
	2			220	229	235	236	242	239
9	1	324.3SB		206	204	209	209	211	209
	2			176	195	203	206	208	183
10	1	324.1SB		212	208	213	213	215	227
	2			198	207	213	213	218	219
11	1	324.4SB		207	206	211	210	212	219
	2			195	204	211	210	214	216
12	1	323.3SB		165	165	170	172	173	173
	2			157	165	172	172	174	173
13	1	323.1SB		143	143	147	146	147	151
	2			138	144	148	147	149	150
14	1	324.4PT		217	211	211	214	215	214
	2			206	214	212	215	216	206
15	1	323.5PT		179	174	175	179	181	180
	2			169	175	176	180	182	176
16	1	18PT		140	140	140	143	142	140
	2			138	143	141	143	144	139
17	1	325.1PT		235	231	234	237	239	239
	2			228	235	235	239	242	236
18	1	324.3PT		215	209	211	216	217	219
	2			207	213	213	216	220	216
19	1	324.1PT		215	212	213	217	218	216
	2			209	216	214	218	220	213

TABLE 29 (Continued)

H05(main store): Load case 3503 on 2/12/81

Load (kg)			637	1254	1876	2495	1871	635
Ch	Run	Gauge	Microstrain/1000 kg					
20	1	28.6	107	105	109	112	114	115
	2		102	108	109	112	115	113
21	1	28.7	124	124	128	131	133	134
	2		118	125	129	131	133	128
22	1	27.1	93	92	94	94	94	94
	2		89	92	94	94	95	94
23	1	27.4	100	100	101	102	101	102
	2		104	102	102	102	102	104
24	1	28.1	105	104	108	109	112	113
	2		100	104	109	110	113	112
25	1	28.2	115	115	117	120	121	123
	2		110	116	118	120	123	118
26	1	28.8	102	101	104	106	107	109
	2		94	101	104	105	108	102
27	1	28.4	99	97	101	103	106	106
	2		91	99	102	103	107	102
28	1	1.4SB	116	115	116	116	117	120
	2		110	113	116	116	117	117
29	1	16SB	210	207	211	208	211	219
	2		201	206	211	209	213	211

TABLE 30

H05(main store): Load case 3603 on 8/7/82

Ch	Run	Gauge	Load (kg) 615	1249	1876	2484	1881	620
			Microstrain/1000 kg					
5	1	223SB	165	167	167	168	170	174
	2		163	165	166	167	168	171
6	1	1.6SB	160	163	163	163	163	165
	2		163	160	162	161	162	163
7	1	2SB	125	128	129	129	131	134
	2		129	126	128	128	129	131
8	1	325.1SB	238	244	245	248	249	260
	2		246	241	244	245	248	252
9	1	324.3SB	212	219	219	223	224	234
	2		215	213	217	221	222	226
10	1	324.1SB	209	216	217	220	221	227
	2		215	213	216	218	220	224
11	1	324.4SB	204	208	209	212	212	216
	2		207	205	208	210	211	210
12	1	323.3SB	170	178	178	180	181	184
	2		178	175	178	178	180	184
13	1	323.1SB	142	146	146	146	145	144
	2		147	143	144	145	144	144
14	1	324.4PT	206	214	211	213	214	219
	2		212	207	211	213	215	214
15	1	323.5PT	168	179	179	182	184	187
	2		178	176	179	182	185	184
16	1	18PT	138	143	143	144	146	147
	2		144	141	143	144	147	147
17	1	325.1PT	223	238	237	241	242	245
	2		238	232	237	241	243	245
18	1	324.3PT	206	215	216	219	223	232
	2		219	214	216	221	223	229
19	1	324.1PT	209	219	217	220	223	229
	2		219	213	217	221	223	226
20	1	28.6	108	114	117	119	122	126
	2		115	113	117	119	122	126

TABLE 30 (Continued)

H05(main store): Load case 3603 on 8/7/82

Load (kg)			618	1249	1876	2484	1881	620
Ch	Run	Gauge	Microstrain/1000 kg					
21	1	28.7	118	128	130	132	134	137
	2		121	126	129	131	134	132
22	1	27.1	94	94	94	96	96	100
	2		96	94	94	96	96	98
23	1	27.4	97	100	101	102	102	103
	2		107	101	103	103	104	105
24	1	28.1	107	111	112	114	116	119
	2		110	110	112	113	115	118
25	1	28.2	115	122	123	125	127	129
	2		120	121	123	125	127	127
26	1	28.8	99	106	107	109	111	115
	2		102	103	107	108	111	111
27	1	28.4	91	98	100	103	105	106
	2		94	96	99	102	105	103
28	1	1.4SB	115	116	117	117	118	119
	2		118	115	117	116	117	118
29	1	27.2	94	100	101	105	106	111
	2		100	98	102	105	108	115

TABLE 11

H05(main store): Load case 4103 on 12/12/84

Ch	Run	Gauge		Load (kg)	628	1259	1878	2497	1871	635
					Microstrain/1000 kg					
7	1	27.4			105	104	103	104	103	102
	2				100	102	102	101	100	94
8	1	27.1	*		91	92	92	94	94	94
	2				92	91	92	93	95	94
9	1	35A			40	47	55	64	71	72
	2				40	47	55	62	68	76
10	1	35B			13	16	21	24	27	27
	2				13	16	20	23	26	30
11	1	35C			41	48	53	57	62	61
	2				43	48	53	56	61	61
12	1	134T			0	0	0	0	0	0
	2				0	0	0	0	0	0
13	1	27			0	0	0	0	0	0
	2				0	0	0	0	0	0
14	1	28.1			99	103	105	109	111	110
	2				103	103	105	108	111	113
15	1	29			-5	-6	-5	-6	-5	-5
	2				-8	-6	-5	-6	-5	-8
16	1	28.7	*		116	122	126	130	133	132
	2				119	122	126	129	133	132
17	1	31			-5	-2	-2	-3	-3	-3
	2				-3	-2	-2	-2	-3	-3
18	1	33	*		5	8	7	7	7	5
	2				8	6	8	8	7	11
19	1	134S			0	0	0	0	0	0
	2				0	0	0	0	0	0
20	1	36A			89	94	99	105	109	110
	2				84	94	98	102	106	110
21	1	36B			57	61	67	72	76	76
	2				54	61	67	70	75	76
22	1	TEMP			0	0	0	0	0	0
	2				0	0	0	0	0	0

TABLE 31 (Continued)

H05(main store): Load case 4103 on 12/12/84

Ch	Run	Gauge		Load (kg) 628	1259	1878	2497	1871	635
				Microstrain/1000 kg					
23	1	4	*	8	9	9	8	9	9
	2			8	9	9	8	9	9
24	1	5		5	4	3	3	3	3
	2			5	4	3	3	3	5
25	1	6		0	0	-1	-1	-1	0
	2			0	-1	-1	-1	-2	-2
26	1	7		0	0	0	0	0	0
	2			0	0	0	0	0	0
27	1	11		0	0	0	0	2	2
	2			0	0	0	0	1	2
28	1	12		-6	-4	-3	-2	-2	-3
	2			-5	-4	-3	-2	-1	-2
29	1	13		-2	-2	-1	0	-1	-2
	2			-2	-1	-1	0	0	0
30	1	20	*	10	10	9	10	10	9
	2			8	10	10	10	11	9
31	1	21		8	9	10	11	11	8
	2			10	9	9	11	10	9
32	1	24	*	14	15	15	16	17	16
	2			14	16	16	16	17	19
33	1	25	*	16	17	17	18	19	19
	2			16	16	17	18	18	19
34	1	21T		0	0	0	0	0	0
	2			0	0	0	0	0	0
35	1	37		140	147	154	161	167	167
	2			145	147	154	158	166	170
36	1	14		-2	-1	-1	-1	-1	-2
	2			-2	-1	-1	-1	-1	-2
37	1	38		156	164	169	175	179	176
	2			161	164	169	173	177	176
38	1	18A		0	0	0	0	0	0
	2			-3	0	0	0	0	0

TABLE 31 (Continued)

H05(main store): Load case 4103 on 12/12/84

Load (kg)			628	1259	1878	2497	1871	635
Ch	Run	Gauge	Microstrain/1000 kg					
39	1	39	161	168	174	179	184	181
	2		162	167	174	177	183	183
40	1	22A	0	0	0	0	0	0
	2		0	0	0	0	0	0
41	1	40	121	127	133	139	142	139
	2		123	127	133	137	141	142
42	1	21C	-6	-6	-5	-6	-6	-6
	2		-5	-6	-5	-5	-5	-6
43	1	16	-2	-2	-1	-1	-2	-3
	2		-3	-2	-2	-2	-2	-3
44	1	324.3SB	204	212	214	219	224	224
	2		210	209	214	218	222	224
45	1	324.3PT	218	211	215	222	225	227
	2		207	211	217	218	223	227
46	1	43	0	0	0	0	0	0
	2		-2	-1	-1	0	-1	-2
47	1	44	0	0	0	0	0	0
	2		0	0	0	0	0	0

* Sign reversed.

TABLE 32

H05(main store): Load case 4203 on 13/2/85

Ch	Run	Gauge		Load (kg) 615	1261	1862	2511	1894	615
				Microstrain/1000 kg					
7	1	27.4		106	104	106	105	104	101
	2			101	104	104	105	106	101
8	1	27.1	*	99	96	97	95	95	103
	2			99	97	96	96	99	101
9	1	35A		33	40	51	60	64	80
	2			41	44	51	62	68	83
10	1	35B		3	10	17	20	22	28
	2			5	12	16	21	23	28
11	1	35C		33	39	47	52	54	63
	2			44	44	47	52	56	67
12	1	134T		0	0	0	0	0	0
	2			0	0	0	0	0	0
13	1	27		0	0	0	0	0	0
	2			0	0	0	0	0	0
14	1	28.1		109	105	107	109	110	125
	2			111	109	107	110	115	125
15	1	29		-5	-2	-4	-3	-3	0
	2			0	-2	-2	-3	-2	5
16	1	28.7	*	130	126	128	129	131	142
	2			125	125	127	129	135	138
17	1	31		8	0	0	1	1	5
	2			11	6	1	1	1	3
18	1	33	*	16	10	10	9	9	13
	2			16	12	9	8	10	11
19	1	134S		-3	-2	-1	0	0	0
	2			-3	-2	0	0	0	0
20	1	36A		83	86	92	98	101	117
	2			91	89	92	100	105	122
21	1	36B		44	52	60	65	67	72
	2			47	53	58	65	69	72
22	1	TEMP		0	0	0	0	0	0
	2			0	0	0	0	0	0

TABLE 32 (Continued)

H05(main store): Load case 4203 on 13/2/85

Ch	Run	Gauge		Load (kg) 615	1261	1862	2511	1894	615
				Microstrain/1000 kg					
23	1	4	*	10	9	9	8	8	10
	2			7	7	8	8	8	5
24	1	5		2	2	3	3	3	2
	2			0	2	3	3	3	0
25	1	6		-3	-2	-2	-2	-2	-3
	2			-3	-2	-2	-2	-2	-3
26	1	7		0	0	0	0	0	0
	2			0	0	0	0	0	0
27	1	11		-8	-3	-2	-2	-2	-5
	2			-5	-2	-2	-2	-1	-3
28	1	12		-13	-7	-5	-4	-4	-10
	2			-13	-8	-6	-4	-5	-13
29	1	13		-10	-5	-3	-2	-2	-7
	2			-8	-4	-3	-1	-2	-5
30	1	20	*	10	10	11	12	12	16
	2			13	11	12	13	13	21
31	1	21		8	9	9	10	9	5
	2			3	8	8	9	8	3
32	1	24	*	20	18	18	18	20	28
	2			23	19	19	19	21	31
33	1	25	*	23	19	19	19	20	26
	2			23	19	18	18	20	23
34	1	21T		0	0	0	0	0	0
	2			0	0	0	0	0	0
35	1	37		148	148	156	160	164	187
	2			153	151	154	161	169	181
36	1	14		-2	-1	-1	0	-1	0
	2			2	0	-1	0	0	2
37	1	38		171	167	172	174	175	194
	2			174	169	170	174	182	194
38	1	18A		-3	-2	-1	-1	-1	-3
	2			-3	-2	-1	0	0	0

TABLE 32 (Continued)

H05(main store): Load case 4203 on 13/2/85

Load (kg)			615	1261	1862	2511	1894	615
Ch	Run	Gauge	Microstrain/1000 kg					
39	1	39	176	170	175	178	180	200
	2		176	174	173	178	185	198
40	1	22A	0	0	0	0	0	0
	2		0	0	0	0	0	0
41	1	40	132	129	135	137	139	155
	2		135	129	133	138	143	151
42	1	21C	-7	-6	-5	-5	-5	-7
	2		-2	-4	-4	-4	-5	-2
43	1	16	-2	-1	-1	-1	-1	0
	2		0	0	-1	0	-1	2
44	1	324.3SB	225	214	220	221	225	247
	2		231	220	218	222	232	247
45	1	324.3PT	216	214	216	219	222	241
	2		216	214	215	219	226	246
46	1	43	0	0	0	0	-1	0
	2		0	-1	-1	0	-1	-2
47	1	44	0	0	0	0	0	0
	2		0	0	0	0	0	0

* Sign reversed.

TABLE 33

H05(main store): Load case 4303 on 27/3/85

Ch	Run	Gauge		Load (kg)	626	1268	1880	2492	1867	624
					Microstrain/1000 kg					
7	1	27.4			99		102	101	98	95
	2				96	96	98	99	97	95
	3				91	98	98	99	99	88
8	1	27.1	*		88		91	92	91	88
	2				83	88	90	92	91	85
	3				81	86	89	90	92	83
9	1	35A			46		60	65	71	77
	2				38	48	56	65	70	58
	3				32	50	60	62	68	71
10	1	35B			16		22	25	27	30
	2				13	17	22	26	28	22
	3				11	19	22	24	26	27
11	1	35C			51		63	66	69	71
	2				50	57	62	68	73	55
	3				42	55	63	64	69	66
12	1	134T			0		0	0	0	0
	2				0	0	0	0	0	0
	3				0	0	0	0	0	0
13	1	27			0		0	0	0	0
	2				0	0	0	0	0	0
	3				0	0	0	0	0	0
14	1	28.1			99		106	108	108	109
	2				101	104	107	110	111	107
	3				99	105	107	108	113	109
15	1	29	*		5		5	6	5	8
	2				11	8	7	7	8	13
	3				13	9	8	8	9	19
16	1	28.7	*		117		128	129	130	135
	2				120	122	126	129	132	128
	3				115	124	127	128	133	135
17	1	31			-8		-5	-4	-5	-13
	2				-5	-2	-4	-3	-3	-11
	3				-5	-6	-5	-5	-6	-16
18	1	33	*		5		8	7	7	5
	2				11	10	9	9	9	8
	3				11	9	8	7	9	5

TABLE 33 (Continued)

HO5(main store): Load case 4303 on 27/3/85

Load (kg)				626	1268	1880	2492	1867	624
Ch	Run	Gauge		Microstrain/1000 kg					
19	1	134S		0		0	1	1	3
	2			3	2	1	1	1	3
	3			3	2	2	2	2	3
20	1	36A		93		102	105	107	112
	2			88	94	99	104	107	96
	3			78	95	102	102	107	104
21	1	36B		61		71	73	76	77
	2			58	65	70	73	76	66
	3			51	67	72	72	77	77
22	1	TEMP		0		0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
23	1	4	*	8		9	8	9	8
	2			6	8	8	8	9	8
	3			6	7	8	8	9	8
24	1	5		3		3	3	3	5
	2			13	7	6	5	5	14
	3			16	9	6	6	7	16
25	1	6		0		-2	-2	-2	0
	2			3	0	-1	-2	-2	3
	3			3	0	-1	-2	-2	2
26	1	7		0		0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
27	1	11		0		3	4	5	5
	2			-2	2	3	4	5	0
	3			-2	2	4	4	4	2
28	1	12		-2		-3	-4	-4	-2
	2			5	0	-2	-2	-2	6
	3			8	1	-1	-2	-1	10
29	1	13		0		-4	-4	-5	-2
	2			8	1	-2	-3	-4	6
	3			8	1	-2	-3	-3	5
30	1	20	*	8		11	11	10	10
	2			3	6	7	8	8	0
	3			-3	5	7	8	7	0

TABLE 33 (Continued)

HQ Stream store: Load case 4303 on 27/3/85

Ch	Run	Gauge		Load (kg)	626	1268	1850	2492	1867	624
					Microstrain/1000 kg					
31	1	21			8		9	10	9	5
	2				3	6	7	9	9	3
	3				3	5	7	5	8	3
32	1	24	*		13		16	16	16	13
	2				5	10	13	14	13	5
	3				2	9	12	13	12	2
33	1	25	*		16		17	18	18	19
	2				19	18	18	18	20	22
	3				19	18	18	18	19	22
34	1	21T			0		0	0	0	0
	2				0	0	0	0	0	0
	3				0	0	0	0	0	0
35	1	37			141		157	161	163	167
	2				145	151	157	164	169	159
	3				141	153	160	161	169	173
36	1	14			0		-1	0	-1	2
	2				2	1	1	0	0	2
	3				2	1	0	0	-1	2
37	1	38			157		172	174	174	173
	2				168	170	173	177	179	173
	3				161	171	174	175	182	183
38	1	18A			0		0	0	0	0
	2				0	0	0	0	0	0
	3				0	0	0	0	0	-3
39	1	39			161		177	179	178	181
	2				173	173	177	181	184	181
	3				166	175	178	179	187	189
40	1	22A			0		0	0	0	0
	2				0	0	0	0	0	0
	3				0	0	0	0	0	0
41	1	40			123		137	140	141	144
	2				133	134	137	142	146	144
	3				129	136	140	141	148	152
42	1	21C			-2		-4	-4	-5	-5
	2				-2	-3	-4	-4	-4	-2
	3				-2	-3	-4	-4	-5	-5

TABLE 33 (Continued)

H05(main store): Load case 4303 on 27/3/85

Ch	Run	Gauge	Load (kg)	626	1268	1880	2492	1867	624
				Microstrain/1000 kg					
43	1	16		-2		-1	-1	-1	-2
	2			-2	-2	-1	-1	-1	-2
	3			-3	-2	-2	-2	-2	-5
44	1	324.3SB		200		214	218	217	216
	2			204	211	214	222	224	212
	3			200	211	214	217	222	216
45	1	324.3PT		212		218	217	218	231
	2			212	207	213	215	216	224
	3			208	210	213	214	222	231
46	1	43		0		0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
47	1	44		0		0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0

* Sign reversed.

TABLE 34

H07(Sidewinder): Load case 2606-12 on 11/8/78

Ch	Run	Gauge	Load (kg)	465	925	1386	1842	1390	467
				Microstrain/1000 kg					
5	1	27.2		161	168	171	172	176	176
	2			159	168	169	172	175	173
6	1	27.3		114	119	121	122	126	131
	2			114	119	119	122	126	128
7	1	27.4		165	172	173	174	175	176
	2			168	173	172	174	173	171
8	1	27.5		37	45	50	51	56	56
	2			37	45	48	51	55	56
9	1	1.6SB		217	218	221	222	222	227
	2			217	220	220	222	222	220
10	1	2SB		181	184	186	187	190	197
	2			183	186	185	188	190	190
11	1	223SB		243	249	255	256	260	268
	2			245	251	254	257	260	263
12	1	320SB		381	394	398	398	400	413
	2			389	399	397	400	402	405
13	1	323.3SB		271	278	284	286	289	298
	2			273	280	283	286	290	291
14	1	326SB		237	249	257	261	268	278
	2			239	251	257	262	268	272
15	1	328SB		215	216	219	220	222	233
	2			217	218	219	221	222	227
16	1	28.2		183	192	198	199	205	203
	2			185	193	196	199	204	201
17	1	28.4		148	159	164	167	173	173
	2			148	159	162	167	172	171
18	1	28.5		148	156	159	160	164	169
	2			151	156	157	160	163	167
19	1	28.6		161	170	175	178	183	186
	2			163	170	173	178	183	182
20	1	28.7		170	174	178	180	183	186
	2			170	175	178	180	183	184

TABLE 34 (Continued)

H07 (Sidewinder): Load case 2606-12 on 11/8/78

Ch	Run	Gauge	Load (kg)	465	925	1386	1842	1390	467
				Microstrain/1000 kg					
21	1	28.8		138	142	144	145	147	148
	2			136	142	142	145	147	146
22	1	28.9		97	102	104	104	107	109
	2			99	102	104	104	107	107
23	1	28.10		90	92	95	93	96	94
	2			90	94	94	94	96	94
24	1	1.4SB		194	200	204	206	208	214
	2			198	202	204	207	208	210
25	1	16SB		310	321	326	326	330	338
	2			314	324	325	327	332	330
26	1	18PT		200	205	210	211	215	212
	2			200	207	208	211	214	210
27	1	27.1		140	142	146	147	150	154
	2			142	144	144	148	150	152
28	1	28.1		168	175	180	181	184	188
	2			172	177	180	181	185	186

TABLE 3

H07(Sidewinder): Load case 2606-45 on 14 S 75

Ch	Run	Gauge	Load (kg)	467	923	1356	1851	1379	465
				Microstrain/1000 kg					
5	4	27.2		161	165	168	169	173	174
	5			156	167	168	170	174	174
6	4	27.3		116	119	121	122	125	131
	5			116	119	121	122	125	129
7	4	27.4		169	172	172	173	173	179
	5			169	174	172	174	175	176
8	4	27.5		43	47	51	52	57	60
	5			41	47	51	52	57	58
9	4	1.6SB		223	224	226	225	226	226
	5			223	223	223	225	226	228
10	4	2SB		188	189	191	191	193	198
	5			186	189	188	191	193	198
11	4	223SB		253	256	260	260	265	271
	5			250	256	257	260	265	271
12	4	320SB		402	404	406	404	408	415
	5			394	405	403	406	409	417
13	4	323.3SB		278	284	289	289	294	299
	5			276	285	286	289	294	299
14	4	326SB		246	256	263	265	273	288
	5			250	258	262	266	273	284
15	4	328SB		223	221	223	223	226	232
	5			220	221	220	224	226	232
16	4	28.2		188	193	198	199	205	213
	5			188	196	198	200	207	213
17	4	28.4		152	157	162	165	172	181
	5			154	160	163	166	173	181
18	4	28.5		152	158	161	162	166	172
	5			152	159	159	162	166	170
19	4	28.6		167	170	176	178	184	191
	5			165	172	175	178	185	189
20	4	28.7		173	176	179	182	185	194
	5			173	178	178	182	186	194

TABLE 35 (Continued)

H07 (Sidewinder): Load case 2606-45 on 14/8/78

Load (kg)			467	923	1386	1851	1379	465
Ch	Run	Gauge	Microstrain/1000 kg					
21	4	28.8	139	140	144	144	148	155
	5		139	142	142	145	148	155
22	4	28.9	98	102	104	104	107	108
	5		98	102	102	104	108	110
23	4	28.10	94	92	95	95	95	90
	5		90	92	95	95	95	95
24	4	1.4SB	203	206	209	210	212	213
	5		201	206	206	210	212	213
25	4	16SB	321	328	331	331	335	338
	5		319	329	328	331	336	340
26	4	18PT	205	205	209	211	213	219
	5		201	207	209	211	215	215
27	4	27.1	141	142	146	148	149	153
	5		143	143	145	148	150	155
28	4	28.1	173	179	183	183	186	191
	5		173	180	181	183	188	191

TABLE 36

H07(Sidewinder): Load case 2706 on 18/12/78

Ch	Run	Gauge	Load (kg)	463	919	1383	1844	1386	463
				Microstrain/1000 kg					
5	1	27.2		156	165	166	168	170	175
	2			156	162	165	167	170	162
6	1	27.3		125	124	122	124	128	134
	2			123	121	122	124	127	130
7	1	27.4		169	173	171	174	173	177
	2			166	169	171	173	172	169
8	1	27.5		39	48	50	52	56	56
	2			37	46	48	51	53	37
9	1	1.6SB		227	228	226	228	227	236
	2			229	224	226	228	229	231
10	1	2SB		190	192	190	193	193	199
	2			192	188	192	193	194	197
11	1	223SB		259	262	260	264	266	272
	2			257	257	261	264	268	270
12	1	320SB		402	404	398	402	400	409
	2			402	401	400	403	403	400
13	1	323.3SB		285	295	293	295	296	303
	2			290	289	293	294	299	296
14	1	326SB		264	274	271	273	278	283
	2			268	268	273	273	281	283
15	1	328SB		225	226	225	227	227	233
	2			223	221	225	226	230	231
16	1	28.2		186	194	195	198	205	216
	2			188	194	195	199	205	205
17	1	28.4		153	162	165	169	176	184
	2			158	161	166	169	175	177
18	1	28.5		162	169	168	170	175	184
	2			164	164	168	169	175	179
19	1	28.6		160	168	171	175	183	192
	2			160	167	171	174	183	177
20	1	28.7		175	181	182	185	190	199
	2			175	180	182	185	191	192

TABLE 36 (Continued)

H07(Sidewinder): Load case 2706 on 18/12/78

Ch	Run	Gauge	Load (kg) 463	919	1383	1844	1386	463
			Microstrain/1000 kg					
21	1	28.8	147	150	150	152	156	166
	2		149	148	150	152	155	160
22	1	28.9	97	102	103	104	107	110
	2		102	102	104	105	108	106
23	1	28.10	95	100	99	99	102	97
	2		102	99	100	99	101	102
24	1	1.4SB	210	211	210	214	214	218
	2		210	207	210	213	215	216
25	1	16SB	339	341	335	337	338	342
	2		337	336	335	337	341	337
26	1	18PT	192	200	202	204	209	214
	2		197	197	201	203	207	203
27	1	27.1	149	150	149	151	154	158
	2		149	146	149	150	154	158
28	1	28.1	182	187	186	190	193	203
	2		184	184	187	190	195	199

TABLE 37

H07(Sidewinder): Load case 2906 on 25/1/79

Ch	Run	Gauge	Load (kg) 467	919	1386	1776	1386	465
			Microstrain/1000 kg					
5	1	27.2	139	155	159	162	161	144
	2		131	149	157	160	159	144
6	1	27.3	107	115	116	118	123	123
	2		107	113	118	118	123	125
7	1	27.4	165	169	168	169	167	166
	2		161	164	167	169	167	172
8	1	27.5	34	41	45	47	51	52
	2		34	41	45	47	51	52
9	1	1.6SB	220	226	224	224	227	230
	2		227	222	227	225	228	232
10	1	2SB	173	179	177	177	180	185
	2		180	176	179	178	181	187
11	1	223SB	240	246	243	243	248	254
	2		246	243	245	244	249	258
12	1	320SB	336	359	362	364	377	383
	2		340	351	363	365	377	383
13	1	323.3SB	253	260	258	258	263	277
	2		263	257	261	260	265	282
14	1	326SB	212	221	221	223	229	241
	2		220	217	224	224	230	243
15	1	328SB	212	216	212	212	216	219
	2		218	212	214	213	217	224
16	1	28.2	178	183	184	185	190	196
	2		180	182	185	186	191	200
17	1	28.4	148	152	155	158	162	168
	2		148	151	156	158	162	170
18	1	28.5	141	147	146	146	152	157
	2		146	144	147	147	152	159
19	1	28.6	152	159	162	164	168	172
	2		156	159	163	166	170	183
20	1	28.7	173	180	183	184	188	191
	2		178	180	184	186	190	198

TABLE 37 (Continued)

H07(Sidewinder): Load case 2906 on 25/1/79

Load (kg)			467	919	1386	1776	1386	465
Ch	Run	Gauge	Microstrain/1000 kg					
21	1	28.8	139	146	145	148	150	155
	2		139	143	147	149	151	157
22	1	28.9	94	100	102	102	105	103
	2		94	98	102	102	105	101
23	1	28.10	90	91	92	92	93	92
	2		90	90	92	92	93	95
24	1	1.4SB	190	197	195	195	199	204
	2		197	193	197	197	201	211
25	1	16SB	283	294	292	291	297	308
	2		295	289	294	293	299	312
26	1	18PT	195	197	199	201	204	211
	2		197	197	200	204	206	226
27	1	27.1	141	144	143	144	146	151
	2		146	142	144	144	146	153
28	1	28.1	163	168	168	168	172	176
	2		167	165	169	168	172	176

TABLE 38

H07(Sidewinder): Load case 3506 on 2/12/81

Ch	Run	Gauge	Load (kg)	463	921	1386	1848	1390	463
				Microstrain/1000 kg					
4	1	323.5SB		262	269	279	286	293	298
	2			253	269	277	285	293	294
5	1	223SB *		244	247	252	254	257	257
	2			233	247	252	254	258	257
6	1	1.6SB *		231	231	232	234	234	238
	2			225	230	232	234	236	233
7	1	2SB *		179	182	186	189	191	190
	2			175	182	187	189	193	190
8	1	325.1SB		363	375	383	392	399	402
	2			359	375	385	392	402	398
9	1	324.3SB		318	330	343	351	353	339
	2			283	317	334	344	348	313
10	1	324.1SB		316	321	329	336	342	348
	2			305	321	331	336	344	344
11	1	324.4SB		296	302	307	312	315	318
	2			285	299	307	311	316	313
12	1	323.3SB*		253	262	268	275	278	279
	2			242	262	270	275	279	272
13	1	323.1SB*		199	199	200	201	201	205
	2			197	200	201	201	203	205
14	1	324.4PT		307	306	309	312	317	320
	2			294	302	309	313	314	316
15	1	323.5PT		279	288	296	301	309	318
	2			272	286	296	302	307	313
16	1	18PT *		205	207	209	212	214	216
	2			197	205	211	212	214	212
17	1	325.1PT		370	375	383	390	397	402
	2			354	369	385	390	393	391
18	1	324.3PT		346	349	356	365	375	393
	2			337	346	358	368	375	387
19	1	324.1PT		331	331	336	341	348	363
	2			320	327	338	344	347	359

TABLE 38 (Continued)

H07(Sidewinder): Load case 3506 on 2/12/81

Load (kg)				463	921	1386	1848	1390	463
Ch	Run	Gauge		Microstrain/1000 kg					
20	1	28.6	*	164	174	179	183	190	197
	2			164	175	182	184	190	197
21	1	28.7	*	175	184	188	192	197	199
	2			171	184	189	192	197	197
22	1	27.1		147	148	149	151	153	156
	2			145	148	150	151	153	151
23	1	27.4	*	173	171	171	173	175	177
	2			166	169	172	174	174	175
24	1	28.1		173	180	186	190	196	203
	2			175	182	188	190	197	201
25	1	28.2	*	186	194	199	202	209	214
	2			184	194	201	203	209	214
26	1	28.8	*	143	148	151	154	158	158
	2			136	144	151	154	157	153
27	1	28.4	*	153	163	170	174	181	186
	2			151	164	171	174	181	186
28	1	1.4SB		177	176	178	181	182	184
	2			171	176	178	180	183	184
29	1	16TSB		313	318	323	326	329	329
	2			305	318	324	326	332	329

* Sign reversed.

TABLE 39

H07(Sidewinder): Load case 3606 on 8/7/82

Ch	Run	Gauge	Load (kg)	483	919	1382	1849	1389	469
				Microstrain/1000 kg					
4	1	323.5SB		263	293	302	309	318	315
	2			271	291	300	312	318	328
	3			263	291	300	308	314	324
5	1	223SB		242	257	260	262	266	262
	2			247	257	260	263	266	277
	3			242	257	260	262	265	268
6	1	1.6TSB		222	232	229	231	232	234
	2			224	231	229	233	232	243
	3			218	231	229	231	230	236
7	1	2TSB		182	193	195	195	199	200
	2			186	193	194	196	199	209
	3			182	194	194	195	197	202
8	1	325.1SB		377	404	408	407	413	396
	2			381	401	407	408	411	411
	3			367	401	407	406	408	403
9	1	324.3SB		334	365	373	379	386	375
	2			340	361	371	380	384	390
	3			329	361	369	376	379	379
10	1	324.1SB		315	339	344	350	356	351
	2			319	339	343	352	356	364
	3			315	339	343	349	354	360
11	1	324.4SB		292	309	312	316	320	320
	2			296	309	312	319	320	332
	3			288	311	312	316	318	328
12	1	323.3SB		261	283	287	290	295	294
	2			271	283	287	292	295	305
	3			261	283	284	289	293	305
13	1	323.1SB		191	196	193	194	193	194
	2			191	196	194	194	193	200
	3			189	196	194	194	192	196
14	1	324.4PT		294	305	313	315	319	315
	2			294	307	311	315	318	326
	3			290	309	311	315	318	315
15	1	323.5PT		280	296	310	314	321	313
	2			276	298	308	314	318	322
	3			271	298	308	314	318	317

TABLE 39 (Continued)

HO7(Sidewinder): Load case 3606 on 8/7/82

Load (kg)			483	919	1382	1849	1389	469
Ch	Run	Gauge	Microstrain/1000 kg					
16	1	18TPT	203	212	219	220	223	219
	2		203	214	218	220	222	226
	3		201	214	218	220	222	219
17	1	325.1PT	365	388	402	402	408	390
	2		358	388	399	402	407	398
	3		354	388	399	403	405	390
18	1	324.3PT	332	355	372	378	387	373
	2		332	357	370	378	384	386
	3		323	357	369	378	384	381
19	1	324.1PT	317	332	344	349	355	343
	2		313	335	342	348	352	354
	3		307	335	342	349	352	349
20	1	28.6	172	185	192	194	200	192
	2		174	187	192	195	199	200
	3		170	187	192	195	199	198
21	1	28.7	170	185	190	193	198	194
	2		174	185	190	194	197	200
	3		168	185	189	193	196	196
22	1	27.1	145	149	153	154	155	153
	2		143	149	152	154	155	158
	3		141	149	152	153	153	153
23	1	27.4	160	167	171	173	176	175
	2		157	168	170	173	175	179
	3		157	169	170	173	174	175
24	1	28.1	176	192	195	196	201	198
	2		180	192	195	197	200	204
	3		176	193	195	196	199	202
25	1	28.2	191	205	213	214	220	211
	2		193	207	212	214	219	217
	3		189	208	212	214	218	215
26	1	28.8	139	149	153	155	159	160
	2		139	149	152	155	159	164
	3		135	148	152	155	158	160
27	1	28.4	160	170	177	178	184	181
	2		162	170	176	179	184	185
	3		153	171	176	179	183	185

TABLE 39 (Continued)

H07(Sidewinder): Load case 3606 on 8/7/82

Load (kg)			483	919	1382	1849	1389	469
Ch	Run	Gauge	Microstrain/1000 kg					
28	1	1.4TSB	172	182	182	182	184	187
	2		176	180	181	183	184	192
	3		170	182	181	182	184	187
29	1	27.2	155	164	171	173	179	175
	2		155	167	171	175	178	183
	3		151	167	171	173	178	179

TABLE 40

H07(Sidewinder): Load case 4106 on 12/12/84

Load (kg)				465	919	1383	1842	1388	465
Ch	Run	Gauge		Microstrain/1000 kg					
7	1	27.4		179	172	172	173	171	176
8	1	27.1	*	146	146	145	151	152	155
9	1	35A		77	90	98	109	119	125
10	1	35B		30	39	43	50	54	54
11	1	35C		77	89	98	104	112	105
12	1	134T		0	0	0	0	0	0
13	1	27		0	0	0	0	0	0
14	1	28.1		176	180	184	188	196	200
15	1	29		-6	-5	-6	-7	-6	-4
16	1	28.7	*	172	179	183	188	192	196
17	1	31		6	2	-1	0	1	6
18	1	33		-11	-9	-7	-9	-9	-11
19	1	134S		0	2	1	1	1	0
20	1	36A		146	158	166	171	179	183
21	1	36B		99	111	117	123	129	131
22	1	TEMP		0	0	0	0	0	0
23	1	4		-4	-3	-4	-3	-3	-2
24	1	5		9	7	7	5	5	4
25	1	6		4	4	3	3	2	2
26	1	7		0	0	0	0	0	0
27	1	11		-6	-5	-5	-4	-2	0
28	1	12		0	0	0	0	0	-2
29	1	13		6	7	5	4	4	4
30	1	20	*	11	11	12	11	12	13

TABLE 40 (Continued)

H07(Sidewinder): Load case 4106 on 12/12/84

Load (kg)				465	919	1383	1842	1388	465
Ch	Run	Gauge		Microstrain/1000 kg					
31	1	21		13	12	12	11	12	17
32	1	24	*	13	13	14	15	16	17
33	1	25	*	15	15	14	16	17	19
34	1	21T		0	0	0	0	0	0
35	1	37		202	212	220	230	239	250
36	1	14		0	0	0	0	0	2
37	1	38		232	242	247	256	263	262
38	1	18A		-4	-2	-1	-1	0	0
39	1	39		239	249	255	261	269	273
40	1	22A		0	0	0	0	0	0
41	1	40		174	184	191	199	204	204
42	1	21C		-6	-5	-5	-5	-6	-6
43	1	16		0	-1	-1	-1	-1	2
44	1	324.3SB		348	353	361	374	387	400
45	1	324.3PT		348	357	367	377	384	387
46	1	43		0	-1	0	-1	-1	-2
47	1	44		0	0	0	0	0	0

* Sign reversed.

AD-A165 846 MIRAGE A3-002 STRAIN RESPONSES TO GROUND CALIBRATION LOADINGS BETWEEN 1970 AND 1985(U) AERONAUTICAL RESEARCH LABS MELBOURNE (AUSTRALIA) M G HIGGS DEC 85 2/2

UNCLASSIFIED ARL-STRUC-TM-425 F/G 1/3 NL

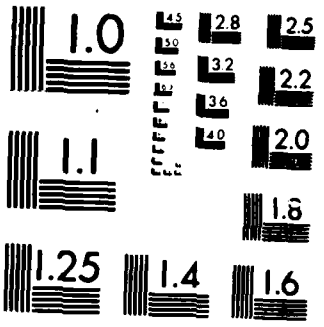


TABLE 41

H07(Sidewinder): Load case 4206 on 13/2/85

Load (kg)				460	934	1377	1848	1381	474
Ch	Run	Gauge		Microstrain/1000 kg					
7	1	27.4		180	172	173	176	178	173
	2			172	177	177	176	176	173
8	1	27.1	*	152	148	151	153	155	148
	2			137	150	151	150	152	150
9	1	35A		63	70	89	96	104	112
	2			52	70	84	95	100	93
10	1	35B		15	21	35	39	43	40
	2			11	24	32	38	41	32
11	1	35C		56	64	79	89	91	86
	2			48	67	79	88	89	76
12	1	134T		0	0	0	0	0	0
	2			0	0	0	0	0	0
13	1	27		0	0	0	0	0	0
	2			0	0	0	0	0	0
14	1	28.1		180	177	184	189	198	200
	2			169	184	187	189	195	205
15	1	29		0	-3	-4	-4	-4	0
	2			0	-3	-4	-4	-5	0
16	1	28.7	*	185	178	184	188	193	203
	2			174	181	185	188	192	203
17	1	31		-11	-2	0	-1	0	-6
	2			-7	-2	-1	-3	-1	-4
18	1	33		-7	-9	-9	-8	-9	-6
	2			-11	-9	-9	-8	-9	-11
19	1	134S		-4	-2	-1	-1	-2	-4
	2			-4	-2	-1	0	-1	-4
20	1	36A		137	137	152	160	165	179
	2			137	142	152	159	163	165
21	1	36B		78	86	102	109	112	112
	2			74	88	100	109	110	101
22	1	TEMP		0	0	0	0	0	0
	2			0	0	0	0	0	0

TABLE 41 (Continued)

H07(Sidewinder): Load case 4206 on 13/2/85

Load (kg)				460	934	1377	1848	1381	474
Ch	Run	Gauge		Microstrain/1000 kg					
23	1	4		-7	-4	-4	-3	-3	-4
	2			-7	-3	-3	-3	-3	-4
24	1	5		4	6	7	6	7	6
	2			4	6	7	7	7	6
25	1	6		-2	2	2	3	2	-2
	2			-2	2	3	3	3	-2
26	1	7		0	0	0	0	0	0
	2			0	0	0	0	0	0
27	1	11	*	22	16	13	12	13	19
	2			22	16	14	12	13	21
28	1	12		-41	-18	-12	-7	-10	-40
	2			-41	-17	-10	-6	-9	-38
29	1	13		-4	3	6	8	7	-2
	2			0	6	7	9	9	4
30	1	20	*	13	11	10	10	10	13
	2			13	12	10	11	10	13
31	1	21		4	6	8	9	8	4
	2			0	6	7	7	7	0
32	1	24	*	22	16	17	17	18	25
	2			22	18	17	17	19	25
33	1	25	*	22	19	19	18	20	30
	2			26	21	20	19	21	30
34	1	21T		0	0	0	0	0	0
	2			0	0	0	0	0	0
35	1	37		209	203	218	226	235	249
	2			198	213	219	225	234	243
36	1	14		-2	-1	-1	-1	0	2
	2			2	1	1	1	1	6
37	1	38		235	232	245	252	259	257
	2			224	240	246	250	256	257
38	1	18A		-7	-3	-1	-1	-1	-4
	2			-7	-2	-1	-1	-1	-4

TABLE 41 (Continued)

H07(Sidewinder): Load case 4206 on 13/2/55

Load (kg)			460	934	1377	1848	1381	474
Ch	Run	Gauge	Microstrain/1000 kg					
39	1	39	245	238	250	256	265	272
	2		230	247	251	255	263	272
40	1	22A	0	0	0	0	0	0
	2		0	0	0	0	0	0
41	1	40	180	177	187	195	202	207
	2		176	182	189	195	201	211
42	1	21C	-2	-4	-5	-5	-5	-2
	2		-2	-3	-4	-4	-4	-2
43	1	16	-2	-1	-1	-1	-1	-2
	2		0	-1	-1	-1	-1	0
44	1	324.3SB	345	344	365	373	389	378
	2		324	357	365	369	382	378
45	1	324.3PT	376	347	358	372	383	395
	2		343	351	363	374	383	395
46	1	43	-2	-1	-1	-1	-1	-2
	2		-2	-1	-1	-1	0	0
47	1	44	0	0	0	0	0	0
	2		0	0	0	0	0	0

* Sign reversed.

TABLE 42

H07(Sidewinder): Load case 4306 on 28/3/85

Load (kg)				467	934	1395	1844	1395	465
Ch	Run	Gauge		Microstrain/1000 kg					
7	1	27.4		169	169	170	174	174	179
	2			169	173	173	175	175	179
	3			182	172	175	174	175	183
8	1	27.1	*	139	141	146	150	150	153
	2			141	147	147	150	151	155
	3			152	147	148	149	151	157
9	1	35A		79	94	101	111	118	127
	2			83	96	103	111	120	127
	3			83	96	103	110	118	125
10	1	35B		32	40	47	52	56	54
	2			32	42	47	50	56	54
	3			32	40	47	50	54	52
11	1	35C		92	104	110	117	125	129
	2			88	104	110	117	125	125
	3			88	102	110	116	122	120
12	1	134T		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
13	1	27		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
14	1	28.1		165	171	177	183	186	187
	2			167	177	179	183	188	189
	3			176	174	181	182	188	187
15	1	29		-4	-5	-5	-5	-5	4
	2			4	-2	-2	-3	-1	11
	3			11	3	0	-1	1	17
16	1	28.7	*	169	178	181	187	190	196
	2			169	179	183	186	190	191
	3			171	176	181	184	187	183
17	1	31		-4	-3	-1	-1	-2	-4
	2			4	-2	-1	-1	-1	0
	3			4	0	0	0	0	4
18	1	33	*	-15	-11	-12	-12	-12	-17
	2			-17	-13	-12	-12	-12	-17
	3			-17	-14	-13	-12	-13	-17

TABLE 42 (Continued)

H07(Sidewinder): Load case 4306 on 28/3/85

Load (kg)				467	934	1395	1844	1395	465
Ch	Run	Gauge		Microstrain/1000 kg					
19	1	134S		4	2	0	0	1	0
	2			0	0	0	0	0	0
	3			-4	0	0	0	0	0
20	1	36A		154	164	170	175	183	191
	2			154	169	172	176	183	191
	3			161	168	174	175	183	191
21	1	36B		105	117	121	126	132	131
	2			103	119	123	127	132	131
	3			105	117	123	125	131	129
22	1	TEMP		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
23	1	4		-2	-2	-3	-3	-3	2
	2			2	0	-1	-2	-1	4
	3			6	1	0	-1	0	9
24	1	5		9	5	4	4	3	2
	2			6	5	4	3	3	2
	3			4	3	4	3	2	2
25	1	6		4	3	2	2	1	2
	2			6	3	3	2	1	2
	3			6	3	3	2	1	4
26	1	7		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
27	1	11		-9	-6	-5	-4	-3	-2
	2			-6	-5	-4	-3	-2	0
	3			-4	-3	-4	-3	-1	2
28	1	12		4	3	2	2	1	-2
	2			0	0	1	0	-1	-6
	3			-4	-2	-1	-1	-2	-11
29	1	13		11	9	6	5	4	4
	2			11	7	6	5	4	4
	3			11	6	6	5	4	4
30	1	20	*	11	12	11	12	14	17
	2			17	15	14	14	15	24
	3			21	15	15	15	16	28

TABLE 42 (Continued)

H07(Sidewinder): Load case 4306 on 28/3/85

Load (kg)				467	934	1395	1844	1395	465
Ch	Run	Gauge		Microstrain/1000 kg					
31	1	21		11	11	10	11	11	11
	2			11	9	10	10	10	6
	3			6	6	9	9	9	4
32	1	24	*	13	14	15	15	16	15
	2			11	13	14	15	15	13
	3			9	13	14	15	15	13
33	1	25	*	13	15	15	16	16	17
	2			15	15	16	16	16	17
	3			17	15	16	16	16	17
34	1	21T		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
35	1	37		199	213	222	232	239	243
	2			199	216	224	230	239	243
	3			205	214	224	229	237	234
36	1	14		0	-1	-1	-1	-1	0
	2			2	1	1	1	1	2
	3			4	2	1	1	1	4
37	1	38		225	238	245	253	257	252
	2			220	241	245	252	257	252
	3			229	238	247	250	254	245
38	1	18A		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
39	1	39		231	242	250	257	262	262
	2			227	247	252	257	262	258
	3			233	243	252	255	260	254
40	1	22A		0	0	0	0	0	0
	2			0	0	0	0	0	0
	3			0	0	0	0	0	0
41	1	40		169	182	190	198	201	196
	2			165	184	190	197	201	196
	3			169	181	190	195	199	189
42	1	21C		-6	-4	-5	-5	-5	-6
	2			-2	-4	-5	-4	-5	-2
	3			0	-3	-4	-4	-4	0

TABLE 42 (Continued)

H07(Sidewinder): Load case 4306 on 28/3/85

Load (kg)			467	934	1395	1844	1395	465
Ch	Run	Gauge	Microstrain/1000 kg					
43	1	16	0	0	-1	-1	0	2
	2		4	2	1	1	1	4
	3		9	4	3	2	3	11
44	1	324.3SB	319	333	351	367	373	379
	2		325	344	353	364	376	379
	3		340	344	356	363	373	370
45	1	324.3PT	338	342	348	361	374	387
	2		323	347	353	365	371	387
	3		347	339	353	359	369	379
46	1	43	0	0	0	-1	-1	-2
	2		-2	-1	-1	-1	-1	-2
	3		-4	-2	-1	-1	-1	-4
47	1	44	0	0	0	0	0	0
	2		0	0	0	0	0	0
	3		0	0	0	0	0	0

* Sign reversed.

TABLE 43

HO5 Load cases summary
(100% m.c.l. - standardized to 2000 kg)

Load case	26033	26035	2703	2803	2903	3403	3503	3603	4103	4203	4303
Gauge	Microstrain										
27.1	184	182	186	187	182	179	188	192	187	191	184
27.2	205	204	201	197	201	0	0	210	0	0	0
27.3	162	159	161	160	159	0	0	0	0	0	0
27.4	209	207	210	210	209	198	204	206	205	210	200
27.5	42	41	39	41	38	0	0	0	0	0	0
28.1	211	211	219	216	205	213	219	227	217	219	219
28.2	236	236	236	235	229	234	240	250	0	0	0
28.4	200	192	200	199	197	197	207	205	0	0	0
28.5	197	197	206	204	190	0	0	0	0	0	0
28.6	218	217	215	214	210	211	224	237	0	0	0
28.7	247	247	251	251	256	258	261	263	259	259	258
28.8	200	200	209	207	206	209	211	217	0	0	0
28.9	121	126	120	120	123	0	0	0	0	0	0
28.10	108	115	116	117	108	0	0	0	0	0	0
16	422	422	432	430	388	407	418	0	0	0	0
323.3	369	369	375	374	355	340	344	357	0	0	0
223	333	332	339	336	321	327	329	335	0	0	0
1.6	323	324	326	326	315	323	327	325	0	0	0
1.4	273	273	279	278	256	230	232	232	0	0	0
18	281	280	272	270	267	274	286	287	0	0	0
328	289	287	292	292	279	0	0	0	0	0	0
2	253	252	256	255	242	252	252	257	0	0	0
326	289	285	299	296	263	0	0	0	0	0	0
320	293	290	297	293	251	0	0	0	0	0	0

TABLE 44

H07 Load cases summary
(100° m.c.l. - standardized to 2000 kg)

Load case	26061	26064	2706	2906	3506	3606	4106	4206	4306
Gauge	Microstrain								
27.1	295	296	302	287	303	307	302	303	299
27.2	343	339	335	322	0	348	0	0	0
27.3	244	244	248	235	0	0	0	0	0
27.4	348	347	347	338	347	346	346	353	348
27.5	102	105	103	95	0	0	0	0	0
28.1	362	366	380	337	381	393	377	379	366
28.2	399	399	398	372	405	428	0	0	0
28.4	333	331	337	316	348	358	0	0	0
28.5	319	324	340	293	0	0	0	0	0
28.6	355	356	349	329	367	389	0	0	0
28.7	359	363	371	370	383	387	377	375	373
28.8	290	289	304	296	307	310	0	0	0
28.9	209	209	208	204	0	0	0	0	0
28.10	187	189	198	184	0	0	0	0	0
16	654	662	674	585	652	0	0	0	0
323.3	571	578	590	518	550	581	0	0	0
223	513	521	527	487	509	526	0	0	0
1.6	444	451	456	448	469	464	0	0	0
1.4	413	419	426	391	360	365	0	0	0
18	422	421	407	405	424	439	0	0	0
328	441	447	453	425	0	0	0	0	0
2	375	381	386	355	378	391	0	0	0
326	523	532	547	447	0	0	0	0	0
320	798	810	805	730	0	0	0	0	0

TABLE 45

Means and standard deviations of strains for 2000 kg load: 1978 calibrations compared with 29XX series

	H05 load	1978 (n=4)		H07 load	1978 (n=3)	
Gauge	2903	Mean	s.d.	2906	Mean	s.d.
Frame 26 upper						
27.1	182	185	2.2	287	298	3.8
27.2	201	202	3.6	322	339	4.0
27.3	159	161	1.3	235	245	2.3
27.4	209	209	1.4	338	347	0.6
27.5	38	41	1.3	95	103	1.5
Frame 26 lower						
28.1	205	214	4.0	337	369	9.5
28.2	229	236	0.5	372	399	0.6
28.4	197	198	3.9	316	334	3.1
28.5	190	201	4.7	293	328	11.0
28.6	210	216	1.8	329	353	3.8
28.7	256	249	2.3	370	364	6.1
28.8	206	204	4.7	296	294	8.4
28.9	123	122	2.9	204	209	0.6
28.10	108	114	4.0	184	191	5.9
Wing main spar						
16	388	427	5.3	585	674	10.1
323.3	355	372	3.2	518	580	9.6
223	321	335	3.2	487	520	7.0
1.6	315	325	1.5	448	450	6.0
1.4	256	276	3.2*	391	419	6.5*
18	267	276	5.6	405	417	8.4
328	279	290	2.5	425	447	6.0
2	242	255	1.8	355	381	5.5
Wing panel						
326	263	292	6.4	447	534	12.0
320	251	293	2.9	730	804	6.0

* Truncated from 1978-85 to 1978 as strain response post-1978 significantly lower.

TABLE 46

Means and standard deviations of strains for 2000 kg load: 1978-85 calibrations

Gauge	H05 load Mean	s.d.	n	H07 load Mean	s.d.	n
Frame 26 upper						
27.1	186	3.9	10	301	4.0	8
27.2	203	4.8	5	341	5.6	4
27.3	161	1.3	4	245	2.3	3
27.4	206	4.3	10	348	2.3	8
27.5	41	1.3	4	103	1.5	3
Frame 26 lower						
28.1	217	4.8	10	376	10.2	8
28.2	238	5.6	7	406	12.7	5
28.4	200	5.0	7	341	11.4	5
28.5	201	4.7	4	328	11.0	3
28.6	219	8.7	7	363	15.8	5
28.7	255	5.9	10	374	9.4	8
28.8	208	6.1	7	300	9.8	5
28.9	122	2.9	4	209	0.6	3
28.10	114	4.1	4	191	5.9	3
Wing main spar						
16	422	9.2	6	661	10.0	4
323.3	361	14.0	7	574	15.1	5
223	333	4.1	7	519	8.0	5
1.6	325	1.6	7	457	10.0	5
1.4	276	3.2	4*	419	6.5	3*
18	279	6.7	7	423	11.4	5
328	290	2.5	4	447	6.0	3
2	254	2.1	7	382	6.4	5
Wing panel						
326	292	6.4	4	534	12.1	3
320	293	2.9	4	804	6.0	3

* Truncated from 1978-85 to 1978 as strain response post-1978 significantly lower.

TABLE 17

Averaged standard deviations of strains
for 2000 kg load (by structural area)

Strain gauge location	1975 calibration			1978-5) calibration	
	No. of strain gauges	H05	H07	No. of strain gauges	H05	H07
Frame 26 upper	5	2.0	3.4	3	4.3	3.9
Frame 26 lower	9	3.2	5.4	6	6.1	11.5
Wing main spar	8	3.3	7.4	6	7.6	10.5
Wing panel	2	4.6	9.1	-	-	-
All	24	3.2	6.1	15	6.2	10.0

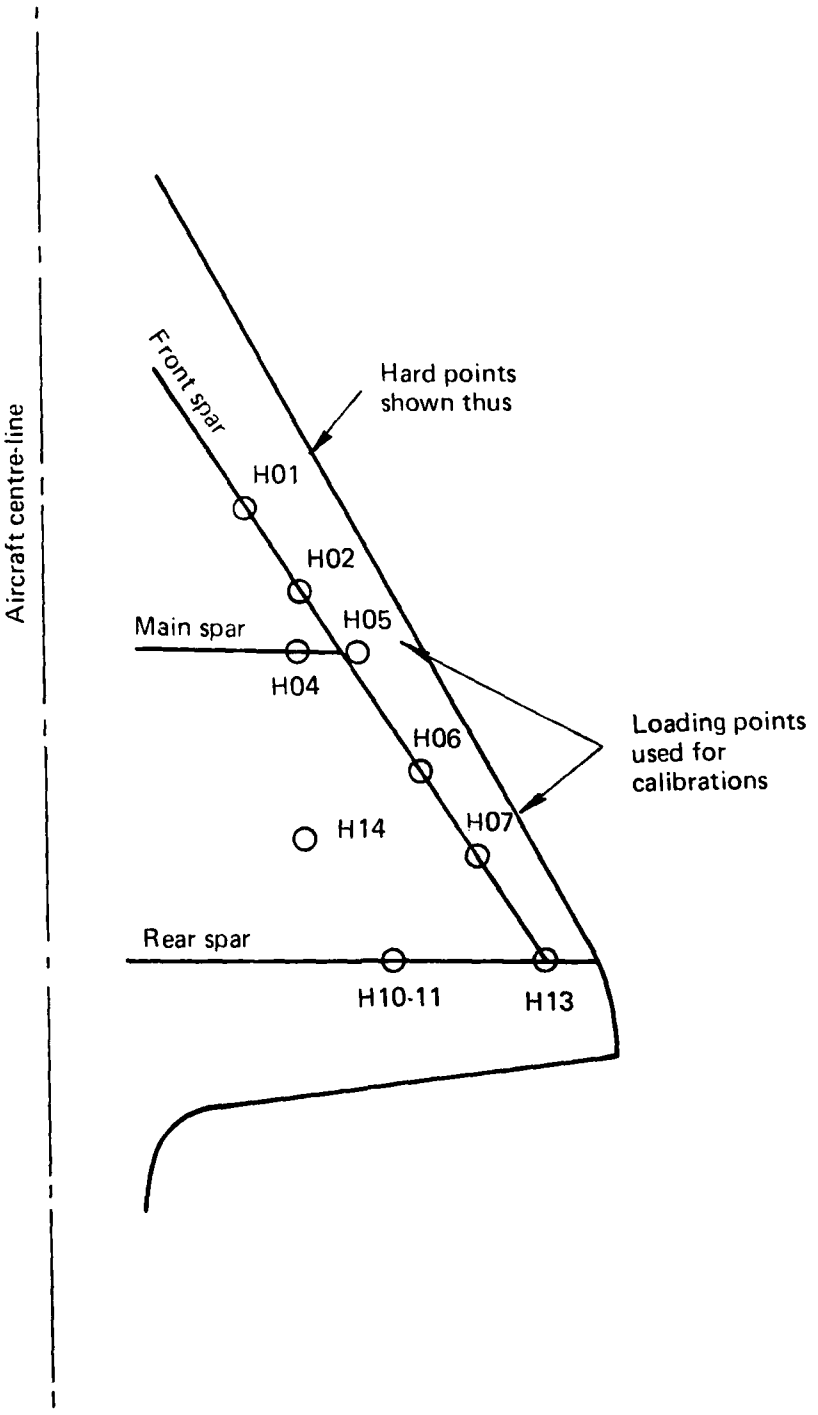
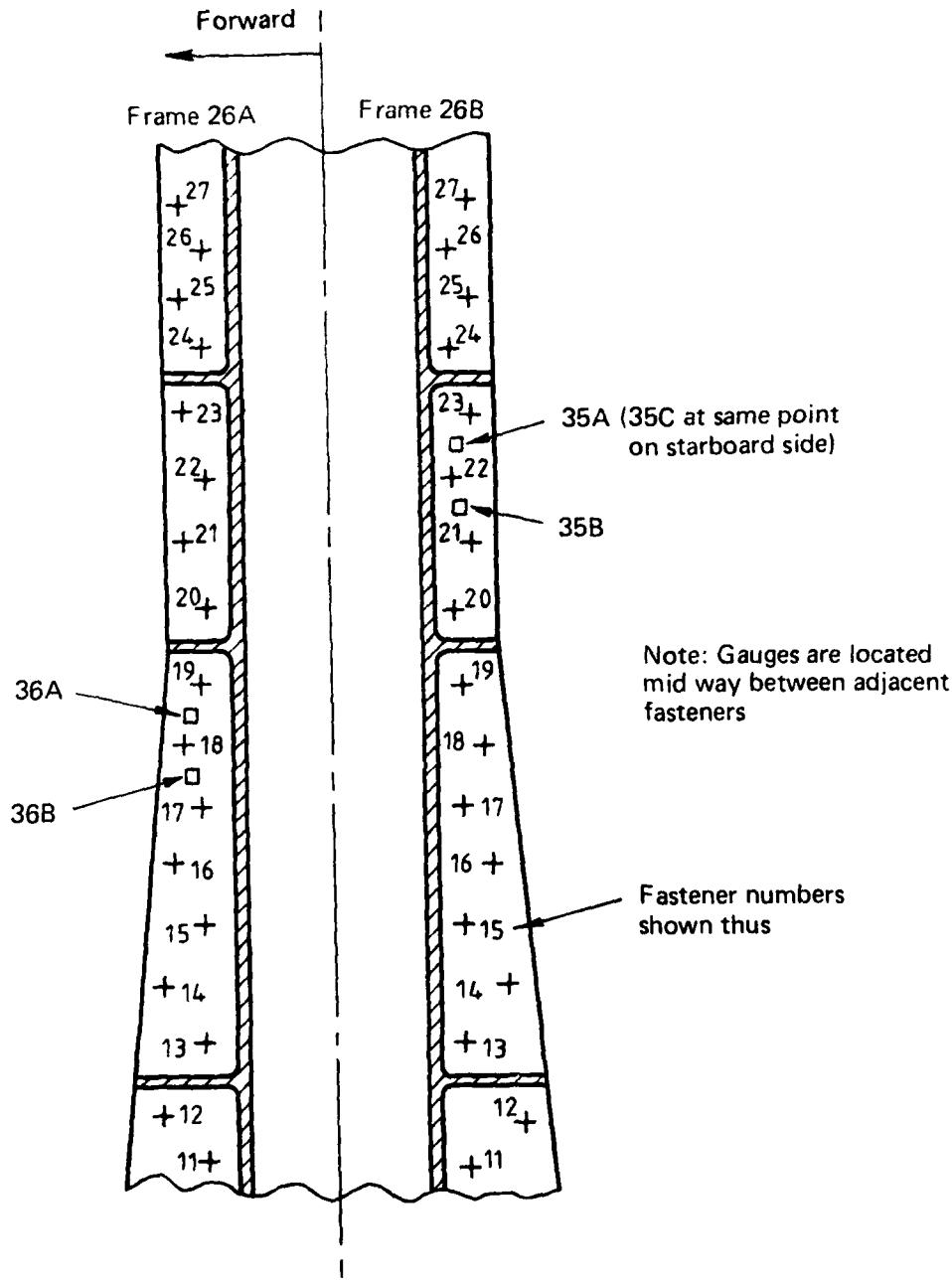


FIG. 1 LOADING POINTS



Section through frame 26 on port side, looking inboard

FIG. 2 LOCATIONS OF GAUGES ON INNER SIDES OF FRAME 26

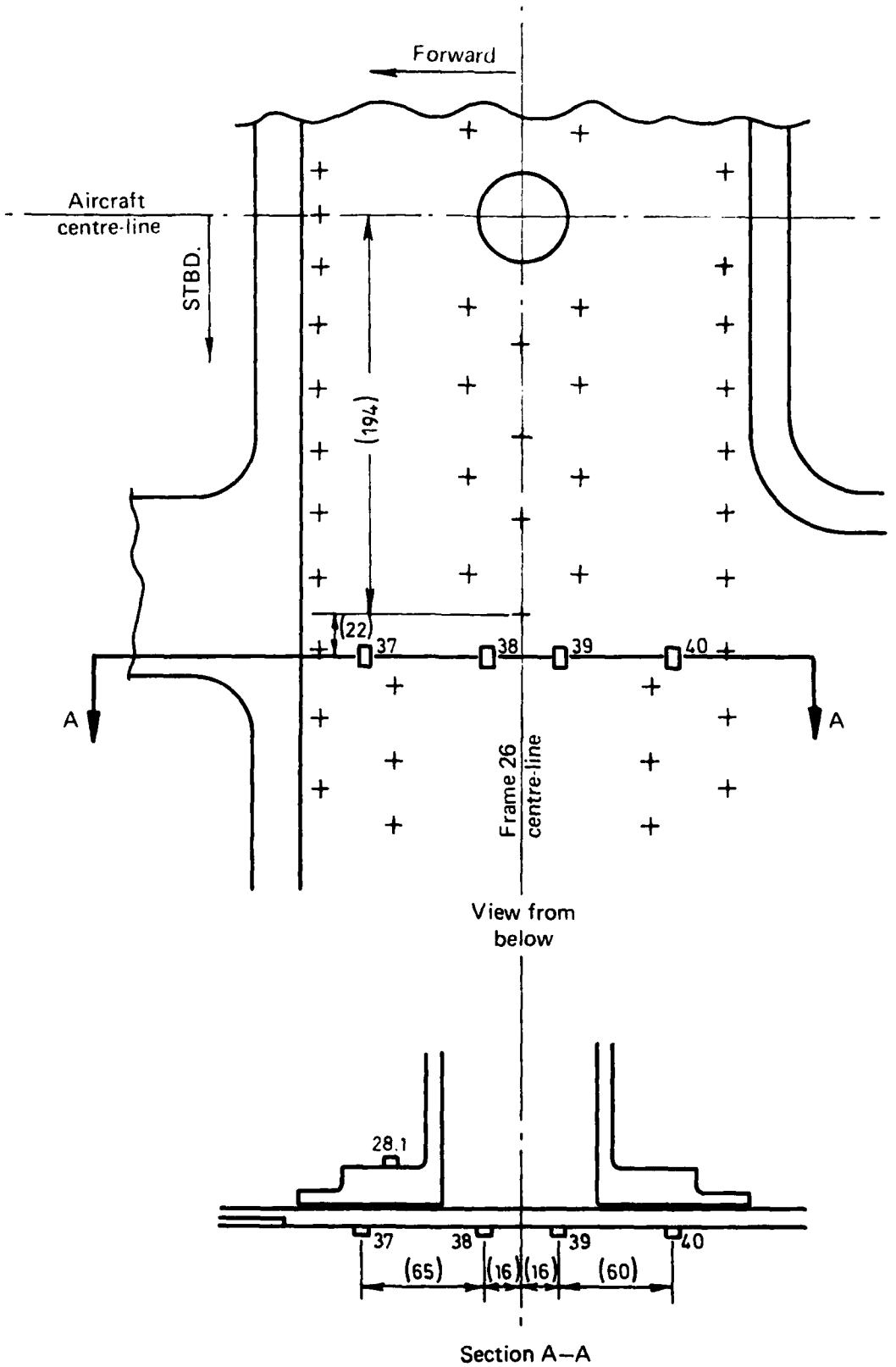


FIG. 3 LOCATIONS OF LOWER STRAP GAUGES
(MEASUREMENTS IN PARENTHESES)

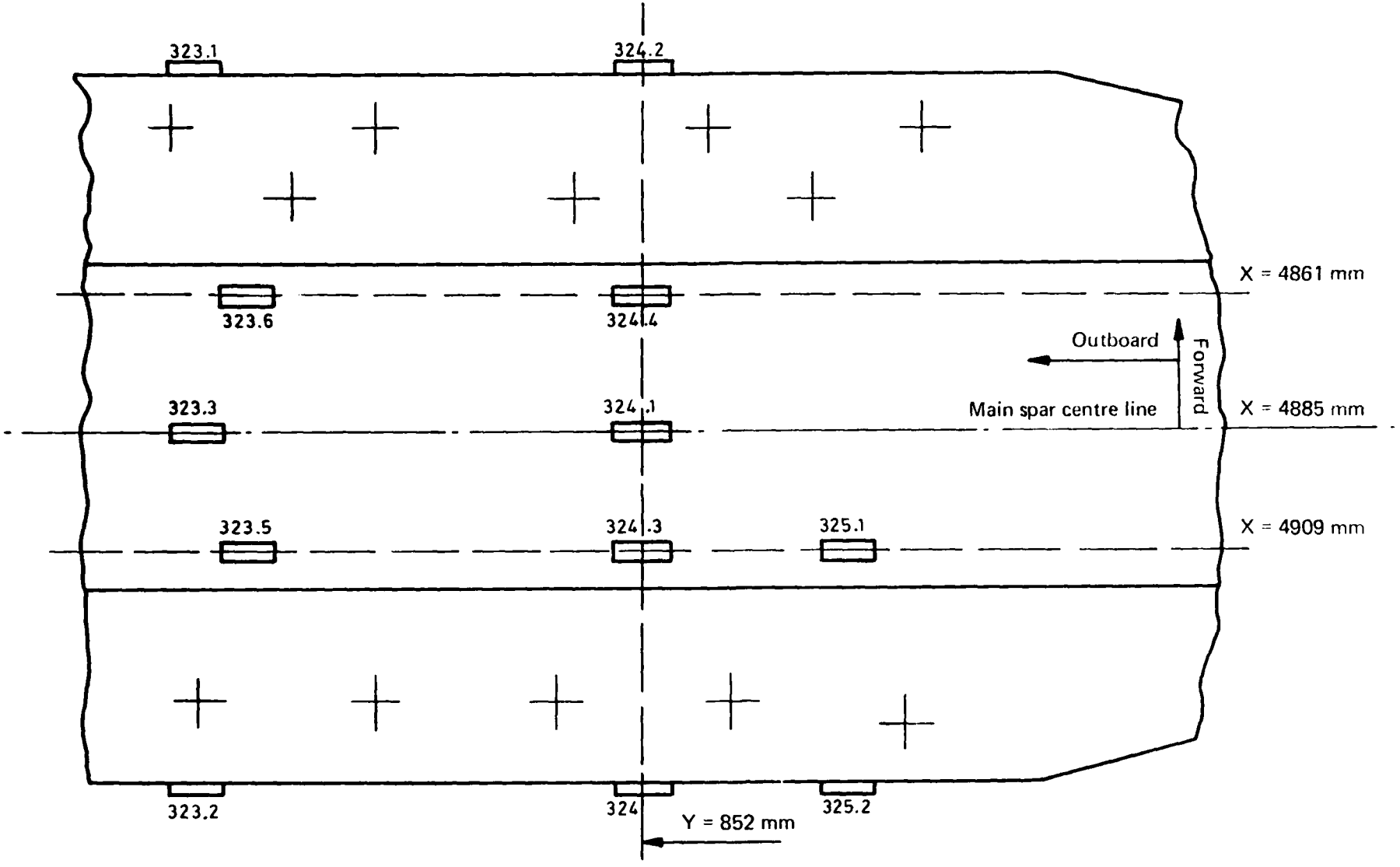


FIG. 4 LOCATION OF MAIN SPAR GAUGES ADJACENT TO WING ROOT (VIEW FROM BELOW SPAR)

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	b. title c. abstract	7. No Refs
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18. Abstract

Between 1978 and 1985, ground calibration loads were applied at the main store and Sidewinder hard points on the wings of Mirage A3-002. Strain response measurements are tabulated for the wing and fuselage frame 26.

In general, consistent results were obtained over the measurement period.

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